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A VIEW of DEATH:
OR,
The Soul's Departure from the World.

A PHILOSOPHICAL
Sacred POEM,

With a copious Body of
EXPLANATORY NOTES,
AND
Some additional Composures.

By J. REYNOLDS.

*Non omnis moriar, multaq; pars mei
Vitabit Libitinam.*

Hor.

London:

Printed for JOHN CLARK and RICHARD HETT at
the *Bible* and *Crown* in the *Poultry* near *Cheapside*,
and W. HINCHLIFFE at *Dryden's Head* under the
Royal Exchange. 1725.

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APPENDIX TO THE CAP

Science by E. M. Q. Society

Do you like my hair?

СЕЛЯНСКИЕ

6

Some Additional Countries

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P R E F A C E



T H E

P R E F A C E.

IS discouraging enough to any writer, to know, that to the very title or theme he presents, the reader's mind will bear a very natural antipathy. We came into the world without our consent; and here we are grown so fond of it, that we are extreamly loth to leave it again. The great Governour of the world may wait long enough, if he were not to remove us, till we are willing. 'Tis sad, and indeed unreasonable, that we that know, that we must go hence (and know not how soon) should be disinclin'd to think of departing. Would incogitancy and oblivion continue us here,



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here, we might more rationally indulge it. But since it will not, but rather do us unspeakable prejudice, in promoting both our unfitness and aversion, 'tis time to throw it off, and betake our selves to the thought and view of the world to which we are going.

The vicissitudes and revolutions, the calamities and enormities that surround us, do all proclaim this world to be an house of discipline and correction, a school of probation, and passage to another. Were it not so, were this lubricous, imperfect, sorrowful scene, all that we were made for, it might well be said, Wherefore hast thou made all men in vain ! It would scarce be a design and achievement worthy of the wisdom and power, the patience and providence of the eternal God. But when we look upon this train of affairs as a preludium to another state and world, the design of God immediately advances, his perfections and counsels shine upon us, the nature of man is aggrandiz'd, his work and business in the world is valued, and time and life are rais'd in signification and importance ; and it presently becomes his wisdom and glory to be duly reconcil'd to a withdrawal hence, into a more spacious, spiritual, and illuminated orb. I need not stay to rehearse all the grounds of credibility,

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credibility, for such a future prospect as is here represented. Methinks common reason recommends it. 'Tis meet the Creator's works should be better known (especially by those that have pleasure therein) than they can be here. The deepest philosophers are much in the dark. The prospect will be delightful to the spectator (to the religious ones, at least;) will commend the perfections, the dominion, and grandeur of the architect and owner; and contribute much to the great ends of future retribution.

Philosophy has of old been reckon'd a proper subject for poesy. Our Cowley represents the students in the prophetical schools (or colleges,) as investigating the mysteries of nature, and celebrating them in their songs of devotion.

They sung how God spake out the world's vast Ball,
From Nothing and from No-where call'd forth all,
From whence the chearful flame leapt up so high,
Close at his heels the nimble air did fly, &c.

And when he has brought his hero to the king
of Moab's Court, he contrives to treat him
there with physiological music and poetry.

Whilst Melchor to his harp, with wondrous skill,
(For such were Poets then, and should be still)
His noble verse through nature's secrets led,
He sung what sp'rit through the whole mass is spread, &c.

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If such were Poets then and should be still;
they have much forgotten themselves and their
theme of late years. But therein had he the
example and authority of the great Mantuan
Bard, who provides the like entertainment for
his Aeneas at the Court of Carthage.

----- Cithara crinitus Iopas

Personat aurata, docuit quæ maximus *Atlas*,
Hic canit errantem lunam, solisq; labores, &c.

Lucretius too would recommend his Epicurean hypothesis by the assistance of the muses; and, perhaps, without it, that insaniens sapientia (as Horace calls it,) that mad philosophy, had never lived so long. Neque equidem dubito (says Dr. S. Parker,) quin epicurea philosophia longe antehac prorsus neglecta & abjecta fuerat, eam nisi ipse (Lucretius scil.) quem nemo forte & majestate & lepore assequutus est, tam præclari poematis argumentum fecisset. Well therefore might a baptized poet sing a better philosophy, to a better end;

----- Gens nescia veri

Ut residem, longaq; animum caligine mersum
Attollat cœlo, & flammantia mœnia mundi
Dum stupet ---- Auctorem agnoscat. ----

Dr. H. More has attempted some philosophical odes; but the antique dress and measures, that

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that he has chosen, it is to be feared, have prejudiced his own, and discouraged others. Natural phænomena are the subject of many scriptural songs ; and what else but the basis of such phænomena must be the theme of the angelical anthems, sung at laying the foundation of this system ? the matter of which would be imitated in one of the ensuing stanza's.

It is to be hoped, that the present philosophy is daily more and more known. It is pity but our young gentry, and the students in each faculty, should be introduced into the elements of it ; at least into a general notice of the structure of the world, according to the discoveries and dictates of it. It would enlarge the mind, lead to the admiration of the Maker, and to religion, and employ the thought and time in pleasant speculations, that would mightily prevent or preclude the follies and vagaries of unthinking and unstudied youth. Philosophy has sometime been call'd meditatio mortis, the contemplation and study of death. According to that account of it, it becomes us all to be philosophers. And death may well be studied, when it will open our eyes and lead us into the regions of philosophy.

I was willing to have spared much of the notes that are here added ; and to have trusted the reader's understanding ; but I was told,

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that I must assist the beginners in philosophy, and others also, in seeing some of the phenomena, that are remarkable. Mr. Whiston has publish'd a map of the Solar System, which may be usefully consulted in some parts of the poem; as also a terrestrial map of Mr. Overton's, which, from the latest observations, shews the variation of the winds and the magnetical needle.

The critic, no doubt, will spy many transgressions of his laws and skill. I must confess, I could never allow my self to study the laws of poetry, or the accuracies of a poem. I never thought my self naturaliz'd (for they say, *poeta nascitur*) that way; or that the rules of art would supply the defects of nature. But let the critic try, and, I suppose, he will find it hard enough to frame his philosophical matter to his poetical mind. He will find it stubborn and resistive, and loth to be dress'd in wit and metaphor, and to be hamper'd with measure and rhyme. Besides, the critics, I fear, will not easily agree in their rules and relish. One censures that, that the other approves. And, it may be, the true, natural poet will have occasion to say, that nature (genius) flies beyond poetic schools, and scorns the pedantry of arbitrary rules. Though that is very seldom and softly to be said, lest it should seem an

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an excuse for ignorance and unskilfulness. Some faults here, as the odd change of measure, the postponing of the adjective to the substantive, the chyming of three lines together, &c. might be supported by authorities and their reasons. But it is not worth while. 'Tis not the genius, the skill, or the name of a poet that is pretended to. If the rude, natural (i.e. inartificial) effort, or vent of a musing mind, may be for once admitted (not to say, accepted) it will be a great favour. I trust, I shall never trouble the reader more with any thing of this kind.

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CASTELLA WINE



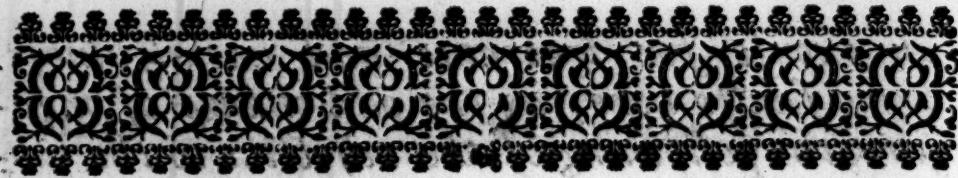
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IX ANNATE

A



Oh ! how we are to be
Left to ourselves.

My robes are few

My friends are few

And all my knowne countesse

P O E M.

Beyond the shades of reverend life

OME sacred Ghost that's lanch'd and gone

From coasts of dark mortalitie,

That's well arry'd, and entayned as one

In Of the triumphant colonie,

That stocks the blest eternitie,

And (that no vacancy may grow

In Heaven more than here below,)

There are some principal critics, that suppose, that the apostolical word, ἀναλύειν (*Phil. 1.23.*) which we render to *depart* (and formerly, to be *dis-solved*) does include in it a metaphor taken from mariners, who are said, in their departure from an haven, or station, λύειν (or ἀναλύειν) *solvere*, to loose off, *launch* away, and be gone.

B.

Re-fills

Re-fills deserted Realms on high ;

Come, ease my lab'ring mind, and tell

What 'tis to bid the world farewell ;

What 'tis to abandon all that's dear,

My hopes and joys so few,

My friends and studies too,

And all my known converses here :

• M Oh ! tell what 'tis to take a flight

Beyond the changes of revolving light,

To worlds I never saw,

Worlds of wonder, and of awe,

Or fill'd with solid glory, or with solid night !

Come, candid spirit, haste and fly,

And (if thou can't declare,

And I the news can bear)

Come, tell me what it is to die.

II. Oh !

All work and no play
 Will goad the mind to torment and o'er
 II.
 a woe avenging His hand, bane his heart
 Oh ! say, what will become of me ?
 When monumental cold shall seize on yon bane
 This organiz'd machine, and freeze bane
 Its motive powers and faculties ?
 What the mysterious plight shall be about me
 When life's weak lamp that all these years has shone,
 Shall be extinct and gone ?
 And when the primigenial fire
 That bad the pulse keep time and beat,
 And strike the moments of its heat, on my bane ?
 Shall languish and expire ?
 When these soft bellows too, that so
 Unweariedly do blow,
 The naturalists speak of two primary qualities, belonging to the human body, that must be kept in due temper and proportion; viz. (*calidum primigenium*, as they call it) the primeval, or primigenial heat; and (*humidum radicale*) the radical moisture; the first of these (whether supposed with some, to be a *actual*, or with others, a *virtual* flame) is usually styled (*flamma vitalis*)

Are working day and night,
 To fan and to foment the wasting light,
 Shall all unmechaniz'd, and all unactive grow ;
 Shall all their toilsome labour spare,
 And play no more with swelling gales of ambient air ;
 And when the purple vital flood
 That drives the wheels and keeps the bellows going,
 In thousand rich meanders flowing,
 That never yet has stood,
² A *mare mortuum* shall be found,
 Forget the beaten trace,
 Be weary of its native pace,
³ And run no more the zealous hasty round.

² *Mare mortuum*, the *dead sea*, or *dead lake*, is the usual name of that noisom lake, that was caused by the destruction of the cities of the plain: *Gen. 19. 25.*

³ Dr. Keil, in his book concerning *animal secretion*, has endeavour'd to calculate the velocity of the blood; he there supposes, that the heart contracts 80 times in a minute; that each contraction throws into (the *aorta*) the adjoining artery, an ounce of blood; that, therefore, each minute, 80 ounces of blood, are thrown into that artery; that, thereupon, the blood runs, in that artery at least, at the rate of 52 feet in a minute: ¹⁰ This swiftness must very much heat it; so that it's reckon'd by some, to be, in the heart, little less hot than scalding water. ¹¹ Dr. Keil, in his book concerning *animal secretion*, has endeavour'd to calculate the velocity of the blood; he there supposes, that the heart contracts 80 times in a minute; that each contraction throws into (the *aorta*) the adjoining artery, an ounce of blood; that, therefore, each minute, 80 ounces of blood, are thrown into that artery; that, thereupon, the blood runs, in that artery at least, at the rate of 52 feet in a minute: ¹⁰ This swiftness must very much heat it; so that it's reckon'd by some, to be, in the heart, little less hot than scalding water.

... consider not how much loss the world...

... cost you in your hands.

III.

... have been a blow on mine own hands.

Alas ! what shall poor I become,

When all the ministers of sense,

The posts of quick intelligence,

Shall march no more from home !

Shall neither tell th' affairs abroad,

Nor their domestick news bring in,

But being slain upon the road,

Dispatch no more advices to the mind within !

When those quick * spies, that were

So ready to detect from far,

Shall be cashier'd their office quite,

No sprightly images restore,

And busily converse no more

With the unnumber'd offspring of reflected light :

* The sensories (or organs of sense) are to report to us not only the transactions that are without the body, but (as being parts of the body) what is done to themselves, or the body they are to guard.

* The Eyes.

² When

2 When the deaf drum shall not rebound,
 And trumpet's winding space
 Shall modulate no more a needful sound,
 T' alarm or allure the * regent of the place;
 When the perceptive hammer shall not know
 Its practice, nor consign the bidden blow
 Unto the wonted anvil there, and so
 No more shall in the sonorous forge be coin'd
 The airy medals of a speaking mind:

3 When the officious guards that wait
 Their duty at the palace gate,

* 'Tis easily learnt from any anatomist, what is the structure of the ear; as that it contains, beside the outward orifice, the *sympanum* or *drum* (which is a membrane stretch'd upon a bony circle, like a vellum upon the head of a drum) and the *barrel*, in the cavity of which are four little bones, call'd the *hammer*, the *anvil*, the *stirrup* and the *os orbiculare*. The external air being mov'd (by the sounds that are made) strikes the drum; the striking of the drum moves the bones that are in the *barrel*, the moying of these bones gives a like motion to the internal air; the motion of that air makes an impression on the auditory nerves in the *cochlea*; which is a winding passage, somewhat like a snail's shell, in which are seated the auditory nerves, that carry the impression to the brain.

* Some moderns seem to discard what have been call'd the *animal spirits*; and content themselves with the name of *nervous juice*: but possibly more active spirits may be contain'd in that juice, than they are aware of. But the famous Sir *Isaac Newton* will tell us, of a moist fine spirit, that he has discover'd, which is requisite to vegetation, sensation, and many other *phenomena*. See the end of his *Schol. gener.* at the end of his *Princip. Phil. edit. 2.*

* *The Soul.*

Still

Still girt to execute commands,

Or embassy to feet or hands,

Shall be disbanded from their coasts,

And hurry swift from their attended posts,

4 Or stupid sink, unable to disclose

Occurring friends or foes :

When the rich palace, with its tower on high

5 (The sacred microcosm's court,

Where now ideas of all qualities resort)

Shall fall, and in its fatal ruins lie ;

When the bright regent, scar'd by this decay,

Shall take her forc'd relenting flight away

From her old-tenanted inhospitable clay.

4 It may be supposed, that at the extinction of life, these spirits are either dissipated or fly away, or are intangled, suffocated in the stagnating juices of the body. (Unless they may be supposed to go away with the departing soul.)

5 Man is called the *microcosm* (the little world) as being an epitome of the *macrocosm* (the great world) that is about him. In the top of this microcosm (the head) there is a gland, supposed to be seated where the sensory nerves do meet. This is called the *conarium*, or *glandula pinealis*; This, Cartes supposed was the seat of the soul. Whence Dr. H. More call'd it *anima acropolis*, the foul's high castle or tower. *Id enim* (conarium sct.) *animæ acropolim, a te meatus, agnosco.* Ep. 2. ad Ren. Cartes.

IV.

Then in what shape will death appear ?

What alter'd apprehensions will he bring ?

Death ! that has often walk'd so near,

In grandeur of a proud remorseless king !

The hec't'ring ghost, at whose black triumphs gain'd,

I have so oft been entertain'd !

Whose breathless trophies scatter'd all around,

Have so augmented, and enrich'd the ground !

Dread heav'n's insatiate minister, that still

Is eager and impatient to fulfil

His bloody old commission, *slay and kill !*

That has past ages into darkness hurl'd,

And still dispeoples the succeeding world !

Death ! the incessant sting, and future bane

Of all the galled guilty and profane !

The undisturb'd retreat, th' immortal ease

Of wash'd and undefiled consciences !

Sworn enemy to all that's brave and bright !
 Sole usher to the world of joys and light !
 Death ! the strange finite uncreated thing !
 The absolute, the poor, precarious king !
 The potent metaphysic shade, which all
 The learned will but mete *privation* to call !
 Great Sovereign ! who exalts his Subjects most :
 Yet tramples them to silence and to dust !
 The legal monarch ! whose just pow'r and throne
 Is founded in unrighteousness alone !
 Whose rightful claims t' oppose with stiff defence
 Is sacred duty and allegiance !
 Thou crafty foe ! whose unexampled pow'r
 Could wound and slay ev'n thine own conquerour !
 Tyrannic fool too ! who by hastening so
 To lev'd repeated victories,
 New triumphs and solemnities,
 Art posturing still to thine own overthrow !
 As death came in by law, so he has no right to rule in the world but
 on the score of transgression.

The greatest captive thou cou'dst ever boast,
 Whose life in conquering thee, was lost,
 Whom more thy vap'ring pride opprest,
 More bruis'd and mortify'd than all the rest,
 Will come c'er long, with grandeur come, to see
 Himself and all his friends reveng'd on thee ;
 Will grind thy bones, and break thy master's head,
 And thou that stol'st a world of life, shalt ever then be dead.

V.

Ah me ! kind spirit, that's march'd above !
 What will death's passion, pow'r, and conquest prove ?
 What will befall me, when this corps shall lie
 A prostrate victim to his sovereignty ?
 Whither, O whither shall I flee,
 When once his eager stroke is past ?

³ It is easily remembred how death is usually painted; and who it is that is said to have *the power of death*; Heb. 1. 14. and what punishment is threatened, or predicted against that deadly domineerer. Gen. 3. 15.

[[I N D I]]

To what strange climate shall I hasten?

And what then shall I be?

How shall I act? what shall I do?

What wonders shall I see?

What scenes and worlds will then be open'd to my view?

My view! with what amazement press'd,

To see my self stript naked and undress'd!

Stript of that garb, that I shou'd always wear,

Had not transgression entred there;

The native garb, which the creator's mind

As half of compound-self design'd.

What start will shake me, at the dread surprize,

To see an uncompounded self arise!

To see, what 'tis will then leap out alive,

A novel self that must my self survive!

The soul now, in speaking, does by the word *self*, usually mean the whole person, inclusive of the body; as when it speaks of feeding, dressing, wounding or healing itself. But after separation, the idea of *self* is changed; it is become a simple, spiritual *self*; not admitting such operations and attributions as it had before.

² This

This indivisible, extended point,
 That scatters life thro' every joint!
 That while it sits, and reigns on high,
 To lowest office condescends,
 From head to foot, from hand to eye,
 Quick errands and dispatches sends;
 That guides at once the head and heart,
 Being all in all, and all in every part!
 The intellective, vital flame,
 That cold and dormant lies,
 Is thoughtless struck, and dies.
 By the unum'd texture of the thinking frame!
 Essential thought! that can pure light commence,

'Tis plain, that here (in so abstruse a subject) several philosophies are
 conjoin'd and complicated. Some, (as the *Cartesians*) suppose that the soul
 is an indivisible (almost mathematical) point. Others, (as Dr. *H. More*) that
 it is (physically) indivisible, (or in their language, indiscernible,) though it
 have (as they call it) *metaphysical amplitude*. Some (as the *Cartesians*, who
 call it *res cogitans*; or even *cogitatio ipsa*) suppose, it always thinks. Others,
 (as Mr. *Lock*) suppose it may exist without thought. But its ability to think
 or not to think (sometimes, for no person can always stay his thought)
 may be as good a note of its incorporeity, as if it did always think.

'Tis evident, the soul has its rational operations, in discourse, reflexion,
 abstraction, as well as strange flights of fancy, when it is not assisted by the
 sensory instruments.

Can clear ideas join, harned to Y
 Divide, review, refine, don't wait
 Run round imagination's line, labiwoT
 Lock'd up close pris'ner by the ministers of sense!
 Kind immaterial form! that quick receives.
 Material laws our mechanism gives!
 Dependent life, that independent lives!
 Proteus! that varies to all shapes at will,
 Assumes all figures that submit
 To test of mathematick wit,
 Yet incorporeal stands, and shapeless still!
 IV
 Strange wanderer! that loves to roam
 Thro' earth, and seas, and stars, yet stays at home!
 * Celestial spark! that band and cement flies,
 Yet

* Some speak, as if they thought, the soul assumed the qualities and forms it has in idea. Some compare the soul to light and flame. Dr. H. More (in *Glanvil's Sadducismus Triumphatus*) disputes against a learned *Psychopyrist* (as he calls him, *viz.* Mr. Baxter) that would, in some respects, compare a spirit to fire and light. Yet in his *Antidote against atheism*, i. e. in the appendix thereto, chap. 3. the same Dr. says, *Suppose a point of light, from which rays out a luminous orb, according to the known principles of opticks; this orb of light now, says he, does very much resemble the nature of a spirit, which is diffused and extended, and yet indivisible.* So that he may be, for ought I know, as much a *Psychopyrist* as the person he calls so. Neither of them suppose, that a spirit

Yet bound by fumes, and slavish sympathies!
 That should by int'rest, and by nature, move
 Tow'rds th' unconfin'd, congenerous realms above,
 Yet fondly, 'midst its num'rous cracks and storms,
 Still craves the crazy cabin it informs !
 Substantial mystery ! that knows
 Exotic beings well ;
 But what it is, how acts, and does,
 Is to itself all unconceivable !

VI.

But now arriv'd at foreign land,
 How mute and hov'ring shall I stand,
 Struck thro' with various fright !

Not knowing what to do,
 And seeing nothing but a dark, confused mass of
 Spirit does consist of fine parts in motion, or that it is actually hot, or luminous
 to the eye; they can design but a very faint, partial resemblance between those
 different beings. And after all, it must remain an inscrutable mystery, how
 such a *divina particula aura* (as the poet calls the soul) should be so tyed to
 the body, as to manage its limbs, and be affected with its maladies.

Nor

Nor whither I'm to go,
 Nor how to spring an unembodi'd Flight!
 Won't ev'n a smart resentment rise
 At those, whose decent art
 Performs the last obliging part,
 In sealing up the lips and eyes?
 Resentment? that, unfriendly, they
 Would studiously prevent my stay,
 Or my essay'd return into the cooling clay?
 Or will some friendly ghost be near,
 By sympathizing kindness brought,
 By late experience taught
 His following brethren to relieve and clear?
 What foreign garb will he prepare
 To cloath a naked stranger there?
 To dress me for the world where I must dwell?
 Or carve thick night and darkness palpable,
 A sultry smoaking vehicle,
 The gloomy robes of death and hell?

Robes

Robes ever unconsum'd, that are
 The badges of confusion and despair !
 Or, by divine commission, frame
 A Æthereal vesture, for a ghost
 Strait bound for the celestial coast,
 Cut out of orient azure, fring'd with lambent flame ?
 The temporary garb, that only may
 A while supply and indicate
 The office of the sublimated clay,
 When rais'd to glory and immortal state !
 Or, rather will some Cherub stand,

* They that would see the notional doctrine of vehicles, with their supposed differences (as terrestrial, aerial, ethereal) according to the vital congruities of the spirits, to which they belong, may consult Dr. More's *Immortality of the Soul*. B. 3. Ch. 1.

² Some suppose, that the soul takes away with it, the animal spirits, as the *stamen*, or ground of the vehicle, it is to assume. It is here intimated, that such vehicular body (if such there shall be) is only to supply the place of the terrestrial one, till it shall be rais'd from the dead. There is a plausible supposition made by the late learned author of *The Religion of Nature delineated*, p. 197. viz. That the soul is immediately united to some peculiar matter, which is as a *refined, spirituous vehicle*, which the soul doth immediately inform, and with which it sympathizes. This may serve to elucidate diverse *phænomena* in the human nature. It may be instrumental in vegetation (such appropriate vegetation as pertains to the human body) to memory and sensation; to the powers and maladies of the soul. This vehicle may the soul take away along with it, as subservient to it in the succeeding state of retribution, and as a sort of seminal principle to the future body at the resurrection of the dead.

By special office charg'd, at hand,

(Long skill'd in this deep exercise,) Come here, I'll show you

To learn me immaterial mysteries?

Will he, with charming message said,

Dismiss my fears, and make me glad?

Will he come teach an unfledg'd soul to fly,

To see without the opticks of an eye?

Teach to distinguish sounds, and hear

Without the grave formality of an ear?

Teach me to speak the troubles of a mind,

That's forc'd to leave his tongue, and head, and heart behind?

Will he come guide and guard my way,

(That can't but it exactly know

By often trav'ling to and fro)

To the exalted realms of everlasting day?

Come then, let's mount and fly
 On winged wills to the rich worlds on high ! —
 Oh me ! my guide ! what wonders here
 In all our road successively appear !
 What natures now, what shapes these atoms wear,
 That form this fluid, this elastick air !
 Atoms too fine for former light,
 But large and gross to incorporeal sight.
 See, with what force they from each other rove,
 As loth t' admit the law of mutual love !
 See, in what native streams they flow,
 What diff'rent streams accost them as they go !

Look

¹ Since there is (as will afterward be shewn) a mutual attraction, in all matter, the constant elasticity of the air seems yet unaccounted for. The parts of it (when leave is given by withdrawing circumambient obstacles) expand themselves (if not fly from one another) with such violence as to break metalline vessels, and take up many hundred times the room they ordinarily do.

² If the earth wheels round its own axis, one would suppose that the contiguous air should have some natural motion from thence; but we shall see,

Look there, how swell'd voluminous vapour skies,

From raging seas into the calmer skies!

What flaming floods discharged there,

From loud volcano's singe the atmosphere!

From hidden mines and treasures up they come,

From each or friendly or infectious womb;

Look, how cloy'd planets yonder vomit forth

Their heterogeneous humours tow'rds the earth!

Nor can the trav'ling hostile comets fail

To send detachments from their angry tail;

What rendezvous is here! no wonder hence

Strange airy laws, and novelties commence!

No wonder, from such mix'd, contentious things,

Prodigious hurry and distemper springs;

that it has one from the sun; and not only so, but philosophers suppose, that there is always in the air a swarm of steams, moving in a determinate course, betwixt the north pole and the south. *Boyle's cosmical Susp.* p. 4.

The atmosphere may well be reckon'd a chaos of heterogeneous particles. Such particles may be suppos'd to come from *planets* and *comets* (when they are in our neighbourhood) since the sun does not only send us his rays, but portions of his opacious matter too, when he casts off quantities of it as big (as is supposed) as *Asia* or *Europe*. *Cosme. Susp.* p. 20. So that it may seem a wonder, that the air is so quiet and healthful as it is. See *Relig. Philosopher*, contempl. 18. sect. 3. &c.

See how they marshal, how their forces join,
How greet and fight, how mut'ny and combine!

Alas! poor native globe, whose various fate
Hangs on the turns of this embroiled state!
Strange, that amidst so rude, repugnant throng,
The globe has peace, and natives breathe so long!

Heaven's shops unlock'd, and workhouses I view,
What cool alembic drops the rain and dew;
What lathe so turns, what art japans the bow,
What looms prepare and weave the fleecy snow;
In what tight mills the icy balls are ground,
Why small or larger made, why white and round;
This servant, nature, hath no leave to play,
But sits at restless work, both night and day.

The mighty sovereign's * magazines I find,
From whence he draws th' artill'ry of his wind,
Prepar'd to succour, or chastise mankind;

† The land and seas in common league unite

* Psal. 135. *He bringeth the wind out of his treasures.*
† It is known, that subterraneal and marine exhalations are continually flying up into the air, which (by divine disposition) may easily annoy this earth.

To

To send up force and arms to plead his right ;
 What wild ingredients all together cramm'd,
 Are into cloudy cannons closely ramm'd,
 At whose dread roar, fierce balls and fires are hurl'd,
 Omens of that which must calcine the world ;
 Whose awful voice such stately terror spreads,
 As strikes imperial crowns and guilt beneath their beds ;
 From what low birth proud meteors climb the air,
 What combs and kindles their presaging hair ;
 Why freest airs a western circuit run,
 And blindly follow, their bright guide, the sun ;
 Why outmost gales a diff'rent conduct boast,

Revolt

⁵ The air, where it is most free (as on the most wide and open seas, the atlantic, the ethiopic, the south sea, and east-indian ocean) is observed to have a current continually, within the tropics, from east to west ; but on the north side of the æquator, inclining somewhat northerly, and on the south-side, somewhat southerly. This is call'd the *tropical*, the *levantine*, the *general trade-wind*, the *universal breez*. *Verulam Hist. Ventor. ad Aut. 2.* *Bokun's Disc. of Wind*, p. 68, &c. *Capt. Dampier's Disc. of Winds*, ch. 1. This is imputed to the Influence of the Sun ; which heats and rarifies the air as it goes ; the rarify'd air losing its heat and tension, the next easterly air will rush in to preserve the *equilibrium* of the air. Thence there will be a continual motion of the air from east to west. *Keil's Exam. of Burnet's Theory*, ch. 5. Thence the Lord *Bacon* calls the sun *genitor ventorum præcipuus*. *Histor. vent.* p. (mihi) 335.

⁶ Near some coasts, the constant winds depart from the course of the universal breez, or general trade-wind, and blow southerly upon the coast ; as upon the

Revolt and pay allegiance to the coast ;
 What friendly truce reigns in the fluid sphere,
 While (their joint empire to divide,
 And manage well the *indian tide*)
 The east and west consent to share the year ;

Though

the western coast of *Africa*, viz. *Guinea* and *Manomotapa*; and the western coast of *America*, viz. part of *Mexico* and *Peru*. These are call'd constant *coasting* winds, or *coasting trade-winds*. *Bobun of wind*, p. 91. *Dampier's Disc.* ch. 2.

In the *east-indian* seas, the phænomena of winds are wonderful. There, on the north side of the line, the wind blows easterly (in concurrence with the general trade-wind) one half of the year, and westerly the other; or to speak more accurately with others, five months one way, and five the other. For, at the breaking up (as they call it) of each wind, it is about a month ere it settles again in the other point. That month is usually stormy and tempestuous. At the breaking up of these stormy months, there comes one very terrible storm, (as it were to conclude the tragical season) call'd by the Portuguese the *Elephanta*; after which they put to sea, without fear of more storms that season. *Dampier of winds*, p. 74. On the south-side of the line, there are also such shifting winds; and they are called *monsoons*, in dutch pronunciation *moussons*, i. e. *motiones*, motions. On the north side of the line there is the east and west *monsoon*; on the south side, the s. s. w. and the n. n. e. *monsoon*. Now though these winds do not shift exactly at one time in all years, yet *September* and *April* are accounted the shifting months; and they as constantly shift by turns as the year comes about. *Dampier of Winds*, ch. 3. *Bobun* p. 119. *Relig. Philosopher*, contempl. 18. sect. 25.

This leads me to mention a very odd phænomenon relating to the motion of the air in mines. 'Tis produced from the famous Mr. *Boyle* from *Agricola*, whom he reckons a classic author in *re metallicâ*, of which he writes. At some distance from a mine (or mineral well) they are wont to sink a pit; from the pit to the well there is made a subterraneous channel for the air to pass from the pit to the well. This channel is called by *Agricola*, *cuniculus*, and *fossa lateris*; by english miners the *drift*; by Mr. *Boyle*, the *ventiduct*. *Agricola* calls the well, *puteus altior*, the higher; and the pit, *puteus humilior*, the lower well; I know not why, unless the one be made in the higher ground, and the other in the lower. The pit is, with us, call'd the *vent-pit* or the *air-shaft*. I am the more particular in these distinctions; because *Agricola* (as Mr. *Boyle* owns) is

Though at each breaking up (like loos'ned schools)
 Tempestuous tumult and commotion rules ;
 Till (to conclude the tragic scenes and skies)
 Enters th' *elephant* with thund'ring noise ,
 And speaks th' epilogue with gigantic voice ;
 The sea with land, through day and night, agrees

On

is not over clear in his terms. Now *Agricola* says, that in spring and summer the air runs down into the higher well, and so through the drift, and out at the pit or air-shaft. *Vernis & aëris diebus in altiorem putum influit, & per cuniculum, vel fossam latenter permeat, ac ex humiliori effluit.* But on the contrary, in autumn and winter, it goes down into the shaft, and so through the drift, and out of the higher well. He says also, that there is a variation of the time for this different flux of the air. That in temperate climates it is in the beginning of spring and end of autumn ; but in cold climates, at the end of spring and beginning of autumn. To which he adds, (as Mr. *Boyle* proceeds) that which is more remarkable ; That the air, both the mention'd times, before its wonted course comes to be durably settled, uses to be for the space of a fortnight, liable to frequent changes ; sometimes flowing into the upper or higher groove or drift ; sometimes in at the lower, and passing out at the other. Now here seems to be a plain terrestrial monsoon, or monsoon at land. The air, for near half a year, passes one way, through the mines ; and the next half year the contrary way. 2. Here's a state of instability and uncertainty at the breaking up ; about half the time of the unconstant monsoon (for so its call'd) in the east-indies ; about a fortnight. 3. Here's the time of changing, which in some climates will be very near the shifting months, *April* and *September*, in the indian seas. Mr. *Boyle* says, he knows not that this relation of *Agricola*'s has been taken notice of by any of the naturalists. Much less do I know, that its parallelism with the *indian* monsoons has been adverted by any. But it seems pity, but they should enquire into the truth of *Agricola*'s report, and, if true, into the reason of it ; which makes me thus digress, to present it to philosophical consideration. *Boyle*'s tract of the *temperature of the subterraneal regions*. p. 38.

* Besides the more durable winds already mention'd, there are winds that alternately blow from the sea, and from the land ; call'd *sea* and *land-breezes* ; Of which, take Capt. *Dampier*'s words ; *Land-breezes are as remarkable, as any winds I have yet treated of ; they are quite contrary to the sea-breezes ; for those blow right from the shore ; but the sea-breeze right in upon the shore. And as the sea-breezes do blow in the day, and rest in the night ; so on the contrary, these do*

(slood) On mutual visit by alternate breez; & agout

How aqueous steams to lofty regions fly;

Thence storm the lands, and there inflame the sky;

How they withal, by chymic art, prepare

The flashing Flames, to cool the heated air;

Why calm seas put on fallacious smile

And

do blow in the night, and rest in the day; and so they alternately succeed each other. Disc. of winds, p. 28. Mr. Bobun speaking of these *land-breezes*, says, that the *portuguese* call them *terreinhos*, or *vento di terra*; p. 92. But the afore-mention'd Captain says, that (not the common *land-breeze*, but) certain anniversary winds, that in the three summer months blow from the coast of *Coromandel*, are called by the *portuguese*, *terrenos*. Disc. p. 4.

⁹ The learned Mr. *Derham* says (in *Physico-Theology*, ch. 3.) That clouds and rain are made of vapours raised from water or moisture only; so that I utterly exclude, says he, the notion of dry, serene exhalations or fumes, talked much of by most philosophers. Fumes being really no other than the humid parts of bodies respectively dry. Must we then derive all the thunder and lightning and flames that break from clouds, from water and moisture? Will homogeneous watery vapours produce all the phenomena of meteors? Is all the matter that mounts into the air, in form of vapour, only water? What becomes of all the subterraneal steams some of which (as Mr. *Boyle* observes, in the tract of the *temperature of subterraneal regions*, p. 29.) are *sulphureous* and *bituminous* in smell, and are apt actually to take fire? Why may not these be as small and as light as watery bubbles? Nay, it may be question'd, whether the aqueous vapours can mount, in such a mixed, heterogeneous atmosphere as ours is, without taking some heterogeneous particles along with them; but let the aqueous steams be the majority, and give the denomination. From such clouds proceed such storms and hurricanes, as wherein the air seems to be set on fire. *Bobun* of winds, p. 288. and before that, p. 282.

¹⁰ It is said, that lightning cools the air; by which one would suppose, that it collects and absorbs the fiery particles, that were in the air; or by its rapid explosion and motion, drives them out of the air, or removes them elsewhere.

¹¹ The greatest storms and hurricanes are usually preceded by a calm; as it is reported in *Bobun*, p. 282. Ordinarily the sea becomes calm on a sudden, and smooth as glass; &c. And the seas that have most calms, have usually also most

And strait with rage and flaming billows boil ;
 12 Why darkned waves pretend to scatter light,
 As if they truly hous'd the sun by night ;
 13 Why pregnant clouds to crown the mountains chuse,
 Knowing, that seas need not their fertile juice ;
 Why hurricanes with dismal wrecks and spoils,
 14 Affright the eastern and the western isles ;

Why

most storms and tempests; in some of which the sea itself seems to be in a flame; Capt. *Proud of Stepney* relates (in *Bobun*, p. 253.) that *both the heavens and raging seas appear'd but as one entire flame of fire.* So p. 288. *The sea in the night seem'd as a real fire, &c.* So Capt. *Dampier* in his *voyage about the world*, p. 414. *It thundred and lightned prodigiously, and the sea seem'd all of a fire about us, for every sea that broke sparkled like lightning.*

12 Besides the luminousnes of the sea in violent storms, (which some attribute to the vehement contrition and collision of collucent salts; *Bobun*, p. 186.) it is found also to be so in the night, without such fury of the waves; about which, various reports were made to Mr. *Boyle*; as that sometimes the sea is wont to shine in the night, as far as the eye can reach; at other times and places, only when the waves dash against the vessel; or the oars strike and cleave the water; that some seas shine often, and others have not been observed to shine at all; that in some places the sea shines when such and such winds blow, in other seas the observation holds not; that in the same tract of sea, within a narrow compass, one part of the water will be luminous, while the other shines not at all. Which made him suspect some latent cosmical law, or custom either of the terrestrial globe or planetary vortex. *Cosmic. susp.* p. 17. Old fabulous philosophy fancied that the sun went down into the sea at night.

13 It is observ'd, that clouds usually attend the land, and especially hover over hills and mountains; yea, Capt. *Dampier* says, *though we have the wind from the shore, and the clouds seem to be drawing off; yet they often wheel about again to the land, as if they were magnetically drawn that way.* *Disc. of winds*, p. 86, 87. *Keil's Examinat.* p. 55. *Relig. Phil.* p. 251.

14 Of the hurricanes, Mr. *Bobun* says, *that they are not alike terrible in all places between the tropicks, but reign more especially near high shores, and islands that lie eastward from the continent; so that they infest the Philippine (which*

Why searching blasts torment the *Perſian* shore,
¹⁵ And *Guinean* seas with loud tornado's roar,
¹⁶ And *Harmatans* revenge the richness of their oar.

Welcome, ah welcome, rare informing light !

That cures my old mistakes, and scouts

belong to the eastern) and *Charibbee* isles (which belong to the western Indies) more than any other parts of the habitable world. p. 256.

“ Tornados are violent voluble winds, that come from the clouds, as their greek name intimates, *enebrias*, *cloud-wind*; either such as break from the bowels of a cloud, or from the clashing of clouds one against another. *Bobun*, p. 231, 235. Which seems also confirm'd by *Capt. Dampier*, when he says, these tornados have been so nigh, that the sea-breeze has dyed away, and we have had the wind fresh out of the clouds, yet they have vanish'd, and yielded no rain to the low parched grounds. *Disc.* p. 84. For these, (says Mr. *Bobun*, p. 247.) no seas have been so infamous as those near *Guinea*. So says Mr. *Greenbill*, particularly concerning the *Gold-Coast*, in *Dampier's Disc.* p. 52. and *Dr. Halley*, in *Relig. Philol.* p. 222.

“ Besides the winds already mention'd, there are such as are call'd *etesian* or *anniversary* winds; (whether the *indian* monsoons, that shift each half year, should be so call'd, let the critics judge) Of these some are extremely hot, others extremely cold. Extremely hot ones affect the *persian* coast and gulf, *Bobun*, p. 177. call'd in *persian* annals, *rad fenum, burning and venomous winds*. p. 180. *Capt. Dampier* says, that the *terrenos* (or land-winds) that in *June, July, and August*, blow from the coast of *Coromandel*, are the hottest that ever he heard of. p. 47. But, in the next page, he says, that the *persian* gulph is as remarkable for these hot winds as either of the former; and that the heat there, by all accounts, does by far exceed that on the other two coasts (i.e. either of *Malabar* or *Coromandel*.) The extremely cold winds are land-winds, that molest the coast of *Guinea*, from *Dec.* to *Febr.* they chap the timber, and kill the cattle, that are unhoused. See *Bobun*, p. 195. and *Dampier*, p. 49. They are call'd *Harmatans*.

My num'rous philosophic doubts,

And chases all my scepticism quite!

Now art first feeds and principles disclos'd,

Essential forms and textures all expos'd;

Textures

Before we consider the construction of compleat bodies, which plainly demonstrate the accurate wisdom of him that ordain'd them, philosophy will lead us to inquire their constituent principles, and the rise of them. The common philosopher will presently talk of mechanism, and mechanical laws and powers. But the thoughtful philosopher will inquire into their rise and origin. Mechanism did not make itself, nor ordain its own laws and powers. We would be willing to know the origin (if there be any) of the fundamental principles of philosophy; as particularly of the epicurean; As 1. *Unde materia?* Whence came this matter, this stuff, that composes this visible world? If it were self-existent, why was it not absolutely immense and omnipresent? all space full of it? and so no room left for its various motions and shifting of places? why must so small a quantity, in comparison with space, be existent, when as much more might as well have been existent? Why was it not likewise as immutable? since matter must have some form, why did it not naturally result into the best form? and save itself the labour of all these mutations, generations and corruptions? Then, 2. *Unde vacuum?* Whence came space destitute of matter? If that be self-existent too, does self-existence, or absolute necessity of existence, result into such different things as matter and *vacuum*? Why not also into other principles? Why not into some excellent immutable form for the matter? Why is not *vacuum* absolutely immense and immutable, (never ceasing to be what it is) and so inconsistent with the presence of matter. 3. *Unde divisio materiae?* Whence came the division of matter? If division be not natural and necessary to matter, how came it to be divided into atoms? Did it chuse such a division as most agreeable? If division be natural and necessary, why has not the division proceeded to this day? From eternity to this day the matter might have been, by a continued division, inconceiveably (not to say infinitely) more subtil and fine (if that be good) than any *cartesian materia subtilis*. And then, if division be so natural and necessary to it, how came it to run into all those unions, cohensions, and combinations, that we see in the world? Then 4. *Unde materiae cohaesio?* Whence came the connection or cohesion of matter? If the atoms were absolutely indivisible, it will contradict the demonstrations that are offer'd for the divisibility of matter *in infinitum*. If the (physical) atoms were yet divisible, whence was their strict union and connection? If such union and connection of parts were natural and necessary

Textures, by which brisk flames do upward ride,

And those by which pellucid waters glide ;

By what apt size and shape the parts they bear

Differ from those earth, and those of air ;

et omnia in

Without

to matter, why is not the whole of it so united, and compacted into one mass, more solid, hard, and infrangible than the firmest adamant ? Then 5. *Unde motus ?* Whence came the motion of matter ? If motion be natural and necessary, it must have some direction and determination of its motion. What was it that gave that particular direction and determination ? If that also be necessary, then it cannot be diverted from it. Whence then are all the cross and contrary motions that are in the world ? To be, of itself, indifferent to all directions of motion, is to stand still, till some exterior agent gives the direction. Then 6. Whence are those peculiar particles or corpuscles that are the constituents of compleat bodies ? The more immediate principles of them ? There are primogenial corpuscles (as Mr. Boyle calls them, *Hist. of partic. qual.* p. 26.) that are the immediate ingredients of larger bodies. These corpuscles have an essential texture (as he intimates, *ibid.* p. 36.) for the constitution of this or the other specific body ; as of air, water, or other things. This essential texture (as he there also intimates) may be preserved, though the bodies they belong to, do, on other accounts, sustain various changes. The corpuscles of quicksilver will retain their essential texture and properties, under various forms and disguises. The constituent corpuscles or particles of one body must much differ from those of another. As those of water from those of air; those of air from those of fire, oil, or mercury. They must differ from one another (as the *corpuscularians* will say) 1. In bulk or size. 2. In shape or figure. 3. In smoothness or roughness of their surfaces. 4. In intestine solidity or porosity. Some of these corpuscles may be internally more porous than others. 5. In distance, or external porosity. Some figures will admit less contact, and make more interstices than others. 6. In mobility or motion. 7. In degrees of union or cohesion. Now what made these primordial corpuscles, and prepared them for such essential texture as is requisite for the several species of bodies that compose this world ? from the various combinations and complications of which arises all that diversity of natural bodies, that we see ; and from the determinate nature and number of which principles, it comes to pass, that no species of physical bodies, is lost, and no new one produced. See Dr. Grew's *Cosm. sacr.* p. 1. ch. 3. and Mr. Ray's *Disc. of the Wisd. of God in Creat.* p. 100. Nay, whence came those diversified particles, that make up those different vast masses of matter, that we call elements or elementary bodies, *wit.* fire,

² Without tir'd study now the central charms appear,
 (Yet not such charms, one would suppose,
 If central space does savage flames inclose)

fire, air, earth, and water? Without each of these, our system could not subsist. Who made such quantities of each, as might serve for the continuation of the system so many ages? and placed them at such distance, and in such order, that one might not absorb or consume the other, and run the system into confusion? where it may be argued, that either these elements (or elementary bodies) are transmutable into one another, or they are not. Some suppose, that some of them (if not all) are transmutable into each other. So the Lord Bacon says, *vapores & exhalationes, qui vertuntur & resorbuntur in aerem; aerem, inquam (non aliud quipiam ab aere) sed tamen ab initio minus sincerum.* He supposes, that aqueous vapours are turn'd into true air. Mr. Boyle, and after him Sir Isaac Newton seem to allow, that water is turn'd into true earth, as cited in the *Relig. Philosop.* p. 238. Yet Mr. Boyle elsewhere says, that the *Aristotelians*, who believe water and air to be reciprocally transmutable, do thereby fancy an affinity between them, that he is not yet convinc'd of. Tract of the Temperat. of submar. Reg. in init. But if they are all of them reciprocally transmutable, what, or who, has presided over all their transmutations, and mutual transformations, that in all these ages, one element has not devoured the other? the more active (v. gr.) the more passive? and so the whole system be turn'd into air or flame? If they are not mutually transmutable, who gave them their several immortal, and indestructible constitutions and textures? Could necessity of existence be as disagreeable and contrary to itself, as fire and water? Or could blind necessity of existence (for here such necessity is supposed to belong to unintelligent matter) yield such different matters and masses, and in such quantities of them (invariable and indefectible, amidst all their combinations, conjunctions, and contextures) as it were on purpose, for the construction of such a world as this? — But these primordial corpuscles and principles of physical bodies, are inscrutable. No microscope has reach'd those of water, air, or light. Nor do the seminal *stamina*, the primordial filaments of animals or vegetables fall under human investigation. I say here, *essential* forms, rather than *substantial*; as Mr. Boyle (as we have seen) speaks of *essential* textures. These substantial forms, being, in the judgment of some great men (and even of Mr. Boyle himself) mistakingly imputed to *Aristotle*. And the ground of the mistake among the interpreters might be the ambiguity of the word, *essentia*, which may be rendred either *substance* or *essence*.

³ Bodies about the earth, we see, tend to the center. And yet they have no reaon to tend thither, if (as many now suppose) fire is lodg'd there. While our bodies are tending thither, the central body (the fire) is flying thence, and hast'ning upward, as fast as it can. What was't, that plac'd the lightest body at the centre, the proper place of the heaviest?

Which

Which bodies restless make, till they come there ;
 Now the mysterious love I truly trace,
 That binds and acts the vast corporeal whole,
 That playes the universal soul,
 Assigning all their order and their place.
 No wonder souls breath union and agree,
 Made up of love and harmony ;
 No wonder, sacred minds (whose glorious head
 Has upon them attractive unction shed)
 Are by a stronger gravitation joyn'd,
 Whose love and harmony is all refin'd ;
 The maker's image, fit to make him known,
 Both through the church and through the world is thrown ;
 Yea his great signature the God of love
 Imprints on what is most unapt to move ;
 The philosopher, that said the soul is harmony, would much more say so
 of virtuous souls, who naturally unite by a plomatic love. We may see also,
 that divine grace brings a celestial attraction and magnetism along with it, while
 we read, that the multitude of them that believed were of one heart and of
 one soul, &c. Acts 4. 32. A contrary gravitation (viz. towards this world) has,
 since then, almost drove that heavenly one out of the world.

+Ev'n

4 Ev'n matter's self is urg'd with am'rous suit,

Inclin'd, in all its parts, to mutual salute.

5 Mysterious

4 Twas long ago supposed, that love was an establish'd law in the corporeal as well as in the moral world; whence, says Dr. S. Parker, *atq; aliquam ejusmodi causam. (quæ materiam in ordinem redigit) materiae adjunxisse dicuntur (veteres fct.) quod ad rerum generationem pleriq; aut amorem, aut amicitiam, aut concordium adhibuerunt; quibus, inquit, vocibus, causam quandam architectricem, poetarum more, adjungebant, que materiam secum consentire, atq; in bunc universi ordinem conspirare efficit.* Disput. de deo, p. 377. Whence, perhaps, it is, that *Lucretius* invokes *Venus* (the known goddess of love) as the inspirer of his physical poem;

*Quæ quoniam rerum naturam sola gubernas,
Nec sine te quicquam dias in lumnis oras
Exoritur.*

Accordingly our *Cowley* celebrates love as the cause of this compacted world;

*What art thou, love, thou great mysterious thing?
From what hid stock does thy strange nature spring?
'Tis thou that mov'st the world thro' ev'ry part,
And hold'st the vast frame close, that nothing start
From the due place and office first ordain'd;
By thee were all things made, and are sustain'd.*

Yet never was this law of love so well evinced and establish'd as in the *newtonian* philosophy; where 'tis a fundamental principle and theorem, *gravitatem in universa corpora fieri, eamq; proportionalem, esse quantitati in singulis.* That all bodies have a gravitation (a gravitating tendency) towards each other; and that, in proportion to the quantity of matter of which they consist. *Princ. Math. 1. 3. prop. 7.* From which fruitful principle are deduc'd, both all the regular motions of the heavenly bodies, both primary and secondary, (the planets and their *satellites*) as also their anomalies and irregularities, caus'd by their mutual gravitations (or attractions) in their access to each other. Which law of gravitation (or attraction) may seem a signature of the great author, who (especially in the evangelical code and economy) is stiled *love*; *1 Job. 4. 16.* It is (as a fundamental law of mechanism, so) a signal instance of divine wisdom and power; and a reproof to the moral world, that is no better acquainted with divine gravitation, and that celestial attraction wherewith St. *Augustine* was touch'd, when he cryes out, *amor meus! pondus meum! eo, feror, quocunq; fe-
ror!*

Besides this universal gravitation, Mr. *Keil* of *Oxford* produces another sort of attraction discover'd by him in the matter about this globe, and publish'd in the *Philosophical Transactions*, Numb. 315. *Post iterata sèpius experimenta,* says he, *materiae terrestri ineffe deprehendi vim quandam attractricem, ex quâ plurimorum*

Mysterious Love ! whose binding pow'r constrains
 The slipp'ry'ft faces with the closest chains ;
 That teaches bleeding steel to wound by stealth,
 Or greeting send, and sympathetic health ;

plurimorum phænomenon ratio petenda est ; meaq; hāc de re cogitata, abhinc quinque annis, domino Newtono indicavi ; ex eo autem intellecti eadem fere, quæ ipse investigaveram, sibi diu ante animadversa fuisse.

Then he shews how this terrestrial attraction (terrestrial, I call it, because at present found only in terrestrial matter; there being no opportunity for tryal, in other planetary matter) differs from the universal gravitation; and it differs principally upon these two accounts; 1. The universal gravitation is always proportional to the quantity of matter in the gravitating bodies. But this terrestrial gravitation (or attraction) is not so; but proceeds rather according to the quantity of contact; so that the more corpuscles touch one another, the greater is the coherence. Which may be a reason of the strong coherence of polish'd marbles, to be mention'd anon. Here, the remoter corpuscles, even in the same body, seem to contribute little or nothing to the cohesion. 2. The universal gravitation increases, as the squares of the distance decrease; and decreases, as the squares of the distance increase. But this terrestrial attraction decreases more than in a double proportion to the distance increasing. So that the effect or force of it reaches but a very little way. But let his curious theorems be consulted. But here is enough to shew, how vainly men (as Mr. Boyle says) philosophize in their studies; and how vainly the cartesian and other theorists attempt the fabricating of such a world as this, without a due examination and experience of the phænomena and laws of nature; and also to shew how justly it is said,

*This whole world's law and life appears to be
 Nought else but love and harmonie.*

³ According to the law now mention'd, the more plain and smooth surfaces are, the more closely and firmly they cling together; whence Mr. Boyle says, that a polish'd piece of marble, skilfully laid upon another piece, as flat and smooth as itself, will, without any other cement, or instrument, than immediate contact, raise up with itself, the lower marble, though an hundred times heavier than itself. So that corpuscles, that have plain surfaces, on all sides, will produce bodies of the firmest cohesion. See Cheyne's *Princ. of Nat. Relig.* ch. 1. sect. 44.

⁴ They that study the laws of sympathy, pretend, by a different management of the bloody knife (or other instrument) either to vex, or cure the wound that was made thereby.

Or my new leave to drown the guilty land.
 ? Inspires dead fibres, in atl^h harmonious tone,
 How could I feel the students now below
 At once to warble and dance unison.
 I befriend them, like the powers divine
 Magnetick virtues and their puzzling cause,
 Which unmechanick seem'd, and sprung from laws
 Of some strange foreign system, now I find
 (No riddles are to love, and to a naked mind)
 I see why the touch'd needle scents about,
 Till it has found the darling quarter out ;
 And why, unconstant grown, it sometimes takes
 New-sprung amours, and its dear north forsakes ;
 (Why it at last (due honour to obtain)

? It is known, that if two musical strings are set to the same note, or key, the striking of one makes the other tremble. Which sort of sympathy they call unison.

* In reference to the magnetical needle there are these phenomena observable ;
 1. Its polarity, or direction towards the poles of the world, north and south ; generally known. 2. Its variation ; or declination from the direct polarity, either east or west. The degrees of which variation are described in some of *Overton's mapps*, from Dr. *Halley's* observations. 3. The variation of the variation ; or the change that has been observed in the variation, at the same place, at different seasons. So Mr. *Boyle* reports, that in and about *London*, since the year 1580, the variation has been observed to decrease from 11 to 6, and then to 4 degrees, till, at last, there was scarce found any variation at all. *Cosmic. Iuss. p. 10.* Then 4. The dipping ; or inclination downwards. And here, the learned Mr. *Derham* seems to have made, and to have imparted to the *Royal Society*, a new discovery ; viz. that, in its dipping, it describes a circle about the poles of the world ; which is here ascribed to a sort of congratulation. But we must wait for a further account of that strange phenomenon. See the *Physico-Theol. b. 5. ch. p. 286.*

Repents its wandrings, and returns again ;
 And why, with polar gratulation led,
 It bows, and wheels around, its am'rous head.
 Why flow'ring vines oblige, from distant soil,
 Their blood, in *Britain*, to ferment and boil ;
 How blooming trees, (as 'twere for future birth,)
 Unstain dy'd cloaths, and call their atoms forth.
 The various circulations now I learn,
 That spring from earth, and into earth return.
 See (philosophy I long'd to know,) -
 But was too deep for poring minds below)

Why list'ning seas so daily watch the shore,
 Crowd up the roads, down which they ran before ;
 As if they yet remember'd old command,
 This odd phenomenon of wine's working and fermenting in *England*, while
 the vines are in flower beyond sea, you may see in Dr. More's *Immortality of*
the soul, b. 3. ch. 12. which he imputes to *effuvia*, flying hither, as far as from
Spain, or from the *Canaries*.
 This phenomenon of linnens parting with their vegetable dyes and stains,
 at that season of the year, in which those trees blossom, had scarce been taken
 notice of, but that it is so, by the great Mr. Boyle. *Cosmick sus.* p. 16.
 The earth, (i. e. parts of the earth) seems to be in a continual circulation
 (in part at least) from one organized body (rising and falling) to another. See
 the *Relig. Phil.* contemplat. 20. sect. 12. p. 288.

Or crav'd new leave to drown the guilty land.

How could I feast the students now below,

¹²(Might I befriend them, like the pow'rs divine

That seaf'nably descended by machine)

Solve their distracting problems quick, and show
Rules of reflected and refracted light,

How all the tribes of sep'rate colours grow,

¹³ And all combin'd beget the single white ?

Learn'd death ! that in one hour informs me more

Than all my years on earth before ;

Than all the academic aids could do ;

Than chronics, books, and contemplations too !

Death ! that exalts me strait to high'st degree !

Commenc'd a more than *Newton* in abstruse philosophic !

¹² In plays, and in heroic poems too, a deity was usually introduced, to assist the hero in an emergent difficulty, or extreme distress; whence the proverb,

Θεος από μανίαν ηλπίδην οὐδείς γενέσθε. *A help at a dead lift.* *Adagia* *Act. 111.*

¹³ Some of the problems, here hinted at, may be seen in the *Philosophical Transactions*, N. 206. Others at the end of Sir *Isaac Newton's* book of *Optics*. 'Tis a strange discovery that great optician has made, *viz.* 1. That some rays of the sun are otherwise (more easily, or with other angles) reflectible and refrangible than others: 2. That whiteness (that seems the most simple of all) is compounded of all the primary colours, or all the rays that afford the primary colours.

Or, like a boy, now leave to grow in size
Replete with wondrous, and returning joys,
How could I leave the judge of all below
And why, with mortal creation too,

IX. Since I possess the powers divine
It leaves me still to turn the world,

How fast we mount, my guide! -- my eye
Can scarce pursue the orbs run whirling by!

Being now arriv'd at *Saturn's sphere*,
Let's stand a while, and take a prospect here! --

These worlds could ne'er be made, nor furnished,
Dull mortals only to amaze,

To call them out to peep and gaze;

They're nobler entertainment for the dead!

Great God! what pow'r and skill combine

To manage this mysterious frame!

Thy glories in each portion shine;

"Tis big with thine almighty name!

Ah happy prospect! that infallibly confutes

Old prejudice, and ends *theoretical* disputes!

Now, now, to fight, the controversy's done,

Whether

Whether our little globe maintain
 The centre of this whirling main,
 Or whisks its yearly journey round the sun.
 The little globe, how wisely plac'd
 In day and night alternate there,
 In changing seasons of the year,
 For cherishing the lives with which 'tis proudly grac'd!
 (Lives, should be good, and worthy of their date,
 Maintain'd each day at vast expensive rate!)

How honourably serv'd and waited on
 By a beneficent revolving moon;

A

One reason for appointing to the departed spirit, such a view of the present system, may be, that it may appear, how great human obligation is to the creator, by seeing at what an expensive rate human life is maintain'd. The earth bears us, and is busy in innumerable productions for us. The sea multiplies within itself, and sends provision into the air for us. The air swells our lungs, and pours down plenty for us. The moon gives us light and tides. The sun has nothing else to do than to hold forth to us light, and send us vivifying rays all around. Or, in divine *Herbert's* measures,

For us the winds do blow,
 The earth doth rest, heav'n move, and fountains flow,
 Nothing we see, but means our good,
 As our delight, or as our treasure,
 The whole is either our cupboard of food,
 Or cabinet of pleasure.

It had been said, that because the moon always shew's us the same face, therefore she does not wheel about her own centre; This gave Mr. *Keil* (of Oxford)

A dark distributor of light !
 That kindly shortens and adorns the night !
 Kind patroness of man's repose and ease !
 '3 Ordain'd disturber of *pacific* seas !
 What wild *moanders* does the wand'rer trace,
 '4 Inconstant to her orb, her light, and pace !
 How oft does the old changling love t' assume,
 In spite of age, new life and youthful bloom !
 How oft with vary'd face affect to ride
 Along th' admiring heavens, and to show
 A picture of inconstancy and pride !
 Ah ! fatal, fatal governess below !

But let me gaze on, and admire

(Oxford) occasion to reply, that 'tis evident to any one that thinks, that the moon shews the same face to us, for this very reason, because she does turn once in the time of her period, about her own centre. Exam. p. 70.
 '3 In the wide *pacific* and *south-sea*, the tides are greater than elsewhere, according to Sir Isaac Newton's report; *In mari autem Pacifico, quod profundius est, & latius patet, aestus discuntur esse maiores, quam in Atlantico & Ethiopico.* Princ. p. 465.

'4 It is said, that by reason of the sun's agency upon the moon (or the moon's gravitation towards the sun) she neither describes the same curve line at all times, nor the same areas in equal times; so that much variation is found in her motions. *Cheyne's Philos. Prin. ch. 3. §. 16.*

⁵ That

That boiling ocean of unfuel'd fire,
 The soul of all the planetary quire !
 Time's parent, and time's offspring too !
 Recorder of the years and breath we drew !
 Vicarious God ! on whose imperial state
 A train of worlds for life and motion wait !
 Obliging pow'r ! thus daily to renew
 Thy largesses to these thy clients bound ;
 Thus solemnly to turn thy self around,
 And take them all within thy friendly view !
 Rich painter ! that can thus caress the eye,
 Bestow on ev'ry face its diff'rent dye,

Cartes supposes that the sun differs from flame, in that it does not so
 need fuel ; *quod non it a great alimento.* Princip. p. 3. Art. 22. If we say it has
 its fuel within itself, what a vast mass must that be, that has been all these thou-
 sand years a flaming, without any sensible diminution ? It is supposed to be,
 at least, an hundred thousand times bigger than our earth. *Relig. Phil.* p. 394.

It's probable, that the sun was the most general deity, among the poor gen-
 tiles, according to Dr. S. Parker's remark ; *Sic rude admodum olim mortalium*
genus, cum adverterant solerissimam universi oeconomiam, protenus opificem, qui
illam considerat, investigatum irent. Sole autem cum nihil illustrius, nihil utilius
*reperiunt, eum proxime, tanquam rerum omnium, tum auctorem, tum regem fa-
 lutant.* Tent. Physico-Theol. l. 2. c. 1. But tho' they adored the creature instead
 of the creator ; we may consider the sun as an image and substitute of the great
 God, in communicating light, and vital influence to the planetary system.

The planets are wont to be call'd *lectores solis*, (Selden's *Prolog. de diis. Syriis.*)
 Whence it may seem great condescension in him, to turn round (in his own
 seat) upon his own axis, in order to serve them all. See Cheyne's *Phil. Princ.*
 ch. 3. §. 21.

And

* And hang the globe in all its gaudy tapestry!

Why did blind nations stile thee God of love?

Was it because thou dost so lovely prove?

! 9 Each body does thy kind approaches woo;

! And yet each body's shy,

! And, like thy story'd *Daphne*, coy,

! 10 And still declines thy close embraces too.

Heav'n's secretary thou, to whom we owe

The op'ning all the wond'rous scenes below!

Grand minister of mortal sense and sight!

That strikes us blind by high excess of light!

Prodigious source of life! that e'er since time begun,

11 Has wasting still and undiminish'd run!

That
Sir Isaac Newton has shewn, that the sun's beams are differently reflectible and refrangible; that on those different modes or degrees of reflexion and refraction, depends the diversity of colours. *Optics*, p. 52 and 87. *Cheyne's Princ.* ch. 1. sect. 40.

* It is shown by and from that great optician, that bodies attract the rays of light towards them in lines perpendicular to their surfaces. *Cheyne's Princ.* ch. 1. § 42.

** Though bodies thus attract the rays of light, yet Sir Isaac seems to intimate (what seems very strange) that the rays of light, in their incidence, do not come quite to the bodies themselves, but begin to bend before their arrival at them; so that, by such bending they form a curve line rather than a proper angle. *Optics*, q. 4. at the end.

*** Though 'tis supposed, that the sun-beams are continually attracted to, and

That far and wide does genial streams dispense,

Bright emblem of his own creator's influence!

Swift streams ! that almost leave the thought behind,

¹² Almost outfly the sallies of the mind!

Sagacious they ! that still unerring tend

¹³ The shortest way to their designed end !

Sure to come there, while nothing can repress

¹⁴ Their speedy flight but unresisting emptiness.

and imprison'd in all bodies, yet there is no sensible diminution of his bulk or influence. Whence Dr. Cheyne takes occasion to tell us, that a body as big as the sun, may constantly, for any finite number of years, send out oceans of streams, and yet the sum of them all be no greater than one cubical inch. *Philos. Princ.* ch. 3. §. 42. But in an infinite duration, such a body (as the sun) must have been exhausted. Whence Mr. Keil justly concludes, that this world neither was, nor could be, from eternity. *Lect. Phys.* lect. 5.

¹² Sir Isaac Newton tells us, from *Romer's* observations, that rays of light, spend about 7 or 8 minutes in coming to us from the sun. Dr. Cheyne calculates, that it flies at the rate of an hundred and thirty thousand miles in a second, or in a pulse of an artery. *Philos. Princ.* ch. 1. §. 35. Should it move at the rate of the swiftest cannon-bullet, Mr. *Derham* reckons it would be above thirty two years in coming to us. *Physico-Theol.* b. 1. ch. 4.

¹³ 'Tis justly reckon'd a piece of divine wisdom, so to have adapted the rays of light, that, in passing thro' different mediums, they still take the shortest way (considering the refracting powers of the several mediums) that can be, towards the point to be illuminated. *Cheyne's Princ.* ch. 3. §. 31.

¹⁴ 'Tis supposed, that, by reason of the above mention'd attraction of light, by and towards all bodies, it moves faster in body, than in a *vacuum*. *Optics*, b 2. prop. 10. *Cheyne's Princ.* ch. 1. §. 41.

Go, doating, fond philosophy,

With all thy catachrestic names!

Call yonder planet, *Mercury*,

Whom such intensive heat

Will not evaporate,

Calcine, nor sublimate,

That all the solar forces shames,

And (like the hebrew chiefs so known,

Into chaldean furnace thrown.)

So unconcerned walks amid the chymic flames!

See there, with what majestic grace

Sweet *Venus* follows and maintains,

The planets are supposed to be more dense (as they had need to be) the nearer they are to the sun; *collocavit ergo Deus* (says the great philosopher) *planetas in diversis distantiis a sole, ut quilibet pro gradu densitatis, calore solis majore, vel minore fruatur*. So near is *Mercury* to the sun, that he adds, *aqua nostra, si in orbe mercurii locaretur, in vapores statim abiaret*. *Princ. Phil. p. 415.* How great a degree of heat then must that planet sustain? and yet he has got the volatile name of *Mercury*!

Through

Through all her travels and her wanes,

A still unclouded, lovely face !

Such constant beauty, though it lie

(As mortal beauties use to be)

Intangled with inconstancie,

Can't choose but charm each astronomic cyc.

The nimble-footed harbinger,

That runs amidst the streams

Of beautifying beams,

Is more illustrious made by her.

Now stoop, weak reason, nor pretend

To scan wise nature's rules, or end !

* Mons. *Huygens* says, that he has often wonder'd that when he view'd *Venus* at her nearest access to the earth, when she resembled an half-moon, through a telescope of forty five or fifty foot long, she always appear'd, all over, equally lucid; that he could not observe one spot in her; though in *Jupiter* and *Mars*, which seem much less to us, they are plainly perceived. *Conjectures concern. the Planet. Worlds*, b. 2. in *Venus*. Whence, *Kepler* cries out, *O vere auream Venerem ! quisquamne dubitabit amplius totum Veneris globum ex puro puto auro politissime fabrefactum, tuus in sole posita superficies adeo vegetum revibrat splendorem !* In *Dioptr. Praefat.* join'd with *Gassendus's Astronomy*.

* *Huygens* argues, that since *Venus* shines so gloriously to us, she must afford to the inhabitants of *Mercury* (if such there are) tho' nearer also to the sun, so much light, that they need not complain of the want of a moon. *Conjectures, &c. b. 2. in Mercury*. The planets are supposed to move the faster, the nearer they are to the sun (their centre); Thence *Mercury* (the nearest of all) may well be stiled, the nimble-footed harbinger; and as being *caducifer* also among the poetical deities.

Ah! who'd expect to find
 That smaller orb displac'd so far behind!
 So little he, so distant set
 From the great spring of light and heat,
 He needs must wear a darker robe,
 Than that which cloaths my native globe;
 So frigid too, how can he bear
 The name of the old *pagan* god of war!
 But here advance to nearer sight
 Loud heralds of eternal might;
 See how plebeian planets fly,
 Possess'd with trembling fear,
 They hide and disappear,
 As mighty *Jove* drives his brisk stages by!
 Vast *Jove*! whose grandeur will disdain
 Of solar distance to complain,
 Mars is supposed to be less than *Venus*, and less than our earth too: The proportion of their diameters may be seen in *Whiston's Theory*, lemma 34. and in his *Solar system*.
 Mars has no moon or satellites; his light and heat are supposed to be twice, and sometimes three times less than ours. *Conjectures, &c. b. 2. in Mars.*
 When

When he himself can such high state display

In his resplendent train,²

That guards his motions and makes bright his way!

Yet, great as he pretends to be,

The royal master of this sphere,

Tho' size and bulk he'll not compare,

(In ponderous bulk and size

No great perfection lies)

Boasts a more pompous train than he.

See what a tedious path he's fain to trace,

How far from Jove's, to give his large retinue space!

But, oh! what curious piece, did art divine,

And well taught nature, here design!

Does in this orb a sacred covenant grow?

Decyphered by this horizontal bow?

How richly's this grave wand'rer drest

¹ Jupiter has four satellites or moons running about him, each of which is supposed to be as big as our earth. *Relig. Philos.* p. 437.

² Saturn is reckon'd to be less than Jupiter, yet he has five satellites to attend him; besides a ring around him; which may be, to the inhabitants (if there are any) about the poles, as a visible horizon. *Huygen's Conjectures*; *Relig. Philos.* p. 437.

With

With an illustrious ring above the rest!
 Around it rolls, makes all its parts appear,
 Yet lies obscur'd in light for half the year;
 What diff'rent office it at once can play,
 Both make the night, and make the day!
 The circulating pace can life retrieve,
 And make the dying fluids live.
 See how its various phases, use, and end,
 At once delight the wond'ring natives and befriend!
 Lay, mortals, lay your learned glasses by,
 Too feeble, too short-sighted to descry

⁸ *Saturn's* ring is observ'd, by spots upon it, to roll round its planet by a motion of its own. It is supposed to be seen continually from the greatest part of *Saturn* for fourteen years and nine months together, which is half their year. The other half year it is hid from sight by its interposure between those inhabitants and the sun. The inside of the ring, next to the planet, is supposed to be much brighter than the outside. 'Tis possible it may reflect light from the inside. And yet a certain zone of *Saturn* will be deprived of the light, both of the ring and of the sun (and so be in darkness) for a considerable time. An amazing thing! (says Mr. *Huygens*) to have the sun, all of a sudden, darkened, without seeing any cause of such an accident. *Conjectures, &c.* b. 2. in *Saturn*.

⁹ 'Tis a conjecture of Dr. *Cheyne's* that one use of *Saturn's* ring, (as also of his satellites) may be to preserve the fluids in motion, and to secure them from freezing by the constant cold that is there. *Philos. Princ.* ch. 3. §. 32.

To All these attendants of his state, who

That thus about him run, ignorant as most

Supply and slight the distant sun,

And rich philosophy and charming views create!

Now, now adieu, ye pleasing store

Of dreams and fancies I indulg'd before!

I see what natives these whirl'd islands bear,

Natives, as diff'rent as their climates are;

Their studies, pleasures, and employments I see,

How much more happy and more pure than we;

More heav'ny they, more fit and glad to raise,

By love and service, the creator's praise!

XI.

Ah me! what different balls take yonder flight,

Vast fiery balls, clad o'er with thickned night!

It may be conjectured, that all *Saturn's* satellites are not yet discover'd; since there is such a disproportion'd distance between the fourth and the fifth, as may be seen in *Huygen's*, and other draughts of them.

See the comets described in Mr. *Whiston's Theory*, and their orbits in his *Solar System*.

How

How regular, how swift, how far they run,
 From us, through all the orbs, around the scorching sun !

Ah wretched wights ! that there in durance dwell,
 Confin'd to those revolving rooms of hell !

Erratic dungeons ! destin'd to present
 Heav'n's justice, exemplary there,
 Upon the prisoners of despair,

Before the several worlds, redeem'd and innocent,
 To warn the one to praise, the other to repent !

Well may astonish'd mortals gaze
 At the ominous flames, with which they blaze,
 No wonder they prognosticate
 The evils they themselves create !

Ah ! now the laws by which they cut the air,

³ Dr. Cheyne having hinted, that possibly the comets may be the habitation of delinquents, in a state of punishment, 'twas easy thence to imagine, that they are so many travelling prisons, to give notice of a divine nemesis to the several habitable climates thro' which they pass. *Phil. Print. ch. 3. §. 18.*

The author of the late ingenious discourse, call'd *The Religion of Nature delineated*, reminds us of the surprizing visits the comets make us, the large trains or uncommon splendour, which attends them; the far country they come from; and the curiosity and horror they excite, not only among us but in the inhabitants of other planets, who also may be up to see the entry and progress of those ministers of fate. p. 80.

Their threatening tails, and long inflamed hair;
 How they are chain'd in their *elliptic* race,
 Nor gallop out into the fields of neighb'ring space;
 Their causes, ends, and dire effects below,
 To awful satisfaction are apparent now!
 Great God! what pow'r, and prudence to the full
 Are scatter'd thro' th' expanded whole!
 Stupendous bulk, and symmetric,
 Cross motion, and clear harmonic,
 Close union, and antipathie,
 Projectile force, and gravitic,

³ "Tis current philosophy now, that the vast spaces between the atmospheres of the planets, and beyond them too, are not full of subtil, ethereal matter, as was wont to be supposed (so does philosophy alter!) but are either perfectly, or, at least sensibly, a pure vacuity. *Whiston's Theory* coroll. to lemma 63. The prime philosopher's expression is, *Si ascendatur in caelos, ubi pondus medii, in quo planetæ moventur, diminuitur in immensum, resistentia prope cessabit.* Princ. Phil. p. 417. It may well be said, *diminuitur in immensum*, if Dr. Bentley's reckoning will hold, who computes, that if an inch-globe of our atmospherical air were rarify'd to the fineness and subtlety of the regions above *Saturn* (if not even of the regions below) it would fill the whole *orbis magnus*.

⁴ It is easily seen, that bodies, that whirl round their own centre, have a projectile force; or throw things from off their surface into the ambient region. So it would be with the revolving planets; but divine wisdom has given things a gravity superior to the projectile (or centrifugal) force; whereby things tend to the centre and are preserv'd in order. See *Whiston's Theory*, lem. 16. *Keil's Exam. ch. 6.* or *Derham's Physico-Theol.* b. 1. ch. 5.
 H In

In such well pois'd proportions fall, that
 As like this artful mathematic dance of all.
 Come hither, all you atheist tribe,
 Who this wise seem to sensible cause ascribe,
 Come hither, as e'er long you must, and see
 The radiant demonstrations of the divine God,
 But justly may you dread to find,
 When thus the veil of Hell shall be withdrawn,
 When long eternity shall dawn,
 Th' existence of th' almighty and all holy mind.

O what confusion and what fears

Will tear your souls, when deity appears !

O study these convictive views,

That may prevent your endless tears !

O now bethink ye of the burning news.

Ghost Sydenham thund'red in his chrony's ears !

News !

I am come to tell thee that there is a God, and a very just and terrible one too; said Major Sydenham's spectre, to his confederate Captain Dyke. A story, told us by Mr. Glanvill, and to which also Mr. Howe refers, in his Living Temple, P. I. p. 277. edit. 1. having had, (as he says) a certain and circumstantial account of

News, that create the joys where angels dwell !
 That feed the deathless worm and rapid flames of hell !
 Th' eternal news, which might but I, the same
 So needful now, with heav'n's just leave, proclaim,
 'Shou'd soon fill all the open'd mouths of Fame !
 Or with which rather, cloath'd in noise,
 More loud than thunder, or than Sina's voice,
 I'd preach, from hence, and quickly make
 The globe and all its unbelievers quake ;
 Yea, the whole planetary system shake !
 I'd storm those bolted cars, and quickly drown

of it ; having desired a worthy person to receive the relation from the Captain's own lips. But because many are incredulous to all stories of this nature, I would only ask them, what respect they will pay to the testimony of the great, honourable philosopher, who says, *The souls of inquisitive men are commonly so curious to learn the nature and condition of spirits, as that they over-greedy desire to discover so much, as that there are other spiritual substances besides the souls of men, has prevail'd with too many to try forbidden ways for attaining satisfaction. And many have chosen rather to venture the putting themselves within the power of demons, than remain ignorant, whether or no there are any such beings.* As I have learnt by the private acknowledgments made me of such unhappy (who' not unsuccessful) attempts, by diverse learned men (both of other professions and that of physic) (who are usually sceptical enough in such points), who themselves made them in different places, and were persons neither timorous nor superstitious. Boyle's Excellency of Theol. p. 3. The confessions that were also voluntarily made to Dr. H. More, may hereafter be mention'd.

* Alluding to Virgil's description of Fame,

*Cui quot sunt corpore plume
 Tot lingue, totidem ora sonant, tot subrigit aures.*

The noise and hurry of each rav'ous town;
 The loud pathetic accents I'd pronounce
 Shou'd stop the tide of bus'ness all at once:
 Dear gain and mirth shou'd soon abandon'd be,
 To give grave audience to my news and me.
 I'd make the proud aspirer crouch, and court
 The face and favour he has made his sport.
 I'd make th' accursed miser throw, with shame,
 His idol to the caves from whence it came.
 I'd soon confute the *Epicure*, and fright
 Th' impatient wanton from his lewd delight.
 I'd cure the fop of his distracted fits,
 And make the brainsick *beau* to find his wits.
 I'd make the *Sceptic* and the *Hobbian* schools
 Recant their *maxims*; and confound their rules.
 The lofty't monarchs (whose sublimer birth
 Makes them ador'd, and look like gods on earth);
 Should soon the force of heav'nly grandeur feel,
 And crowned heads beneath his footstool kneel.

No more, in vain, should the weak preacher spread
 Persuasive hands, and breathe unto the dead.

I'd make him put more soul into his breath ;
 I'd make them hear, and burst the chains of death.

Conscience should wake and preach ; and conscious fears
 Should roar more loud than mortars in their ears.
 Through ev'ry clime the rev'rend news should sound,
 With echo's should each cave and vale rebound,
 And vocal seas repeat and roll the news around !

Alas ! fond thought ! this complicated throng

Of works and laws divine,

In which immense perfections shine,

More loudly tells the news without a tongue !

When this wide plan was first pourtray'd,

The system's large foundations laid,

The rich materials brought, and in just ballance weigh'd,
 Well

Well might pleas'd seraphs thour, and all the throng
Of heav'n-born sons strike up a celebrating Song.

• O, O, the treasures of eternal might !
The magazines of boundless love and light !

• Though in our realms new admirations grow,
Where immaterial wonders always flow,

• Turn we aside, and stoop to see
New matter's maze, and multiform varietie !

Matter ! whose dusky nature can surprize

• Our shining intellective faculties !

• That gravels them with undissolved knot ;

• ' Tis still divisible, and yet 'tis not ;

• Bless us ! how matter and its motion can

• In all the pomp of intricacy reign !

• Huge masses, nicest subtilties,

• Weights,

* It paffed for demonstrated philosophy now, that matter is divisible *in infinitum*. Yet the arguments on the other side are so strong, that they seem to hold Mr. Boyle, and other great philosophers in suspense; and I have heard an old scholastical disputant jocularly say, he would dispute the devil upon that question, let him take which side of it he would. Some have thought it difficult enough to gravel even an angelical acumen.

* If you wou'd see the vast bulk of matter in our system, see the computed diameters and densities of the sun and planets in Mr. Whiston's *Theory*, lem. 33.

'Weights, numbers, figures, and degrees
 'Of union, textures, times, and tone,
 'And measures, that transcend our own;
 'Discordant motions, swift and slow,
 'Yet uniform and constant too,
 'Direct, elliptic, circular, and
 'Vibrations too that interfere,
 'Thousands of refractions far and near,
 'How swiftly by the dextrous skill

&c. If you would consider the incomprehensible subtleties of matter, see *Roubault's Physics* and *Boyle of Eusturia*; Or *Lewenhoek*, who will tell you, that if a small grain of sand were divided into a thousand millions of parts; and one of those parts into a thousand millions more, yet they would be too big for the small particles of water, that are still round and flexible and variable into several figures; Or *Keil's Introductio ad veram Physicam*, who will tell you, that what some philosophers have fancied concerning spirits, may be physically true concerning some diminutive *animalcula*, viz. that many thousands of them may dance upon the point of a needle. *Lett. 5.* Or see the *Relig. Philosopher*, contempl. 25.

3. Vast variety of motion is found in the system; and through all the orbs, to *Saturn* (and farther) are darted rays of light and heat. Now heat is supposed to consist in a vibrating motion. *Cheyne's Print. ch. I. §. 38.*

4. So many and so evident are the relations of the remotest bodies of the system to one another, and of all to man, and of man to them (as an inhabitant or usu-fructuary) that it must be a boundless mind, that comprehended and adjusted them all into such *conspiracy and harmony*.

More servants wait on man,

*Than he'll take notice of; in every path
He treads down that which doth befriend him*

*When sickness makes him pale and wan;
Oh mighty love! Man is one world, and bath
Another to attend him!*

Herb.

Of

' Of potent counsel, and omniscient will,
 ' Are calculated all and intermingled here !
 ' How well are breath divine and dust compriz'd !
 ' Two worlds in six-foot length epitomiz'd !
 ' And contradictions harmoniz'd !
 ' But what amazements will not meet,
 ' When heav'n it self does in grand council sit !
 ' Rise, noble world, and find us true
 ' In all appointed ministry to you !
 ' Blest be the pow'r, displays his glories thus !
 ' Rise, rival-world, and at the end
 ' Of destin'd rolling ages, send
 ' A welcome col'ny to our world and us !
 Ah ! dear deluded virtuosi, who
 Are wistly groping in our world below,
 Now sink, oh sink your studious pride,
 Spare idle pains, and wisely cast aside,
 Your learn'd, *Utopian* theories,

* As *Gen.* i. 26.

Well-manag'd blind hypotheses,

Of institutes d'vne ridiculous wide!

What can waste *vacuum* and atoms do!

Or plenitude and motion too!

(But, O what empty heads are those

That plenitude with motion wou'd compose!)

Or jostling *Vortices*; unless they can

Demonstrate the vertigo of a wanton brain!

Or universal gravitating pace,

(That comes so late, and goes so far

To solve the rules and orders here,))

Tho' blended also with projectile race!

* 'Tis known, that Sir Isaac Newton has broke to pieces the *Cartesian Vortices*, *Princ. Phil.* p. 400. Where, after an easy demonstration, he concludes, *Igitur hypothesis vorticis, cum phænomenis astronomicis omnino pugnat; & non tam explicandas, quam ad perturbandos motus celestes, conductit.* Whence one would pity the world, that is so often cheated with false philosophies; and seduced by them, to the denial of many theological truths. It is meet, there should be such a prospect as this after death, that the mind may see its errors and be undeceived; and may see withal, how far divine ordinations transcend human contrivances.

⁷ 'Tis strange, that such an agreeable principle, as that of universal gravitation, (it being so rational, that homogeneous, consimilair substances should aggregate or unite) and which seems confirm'd by so many phænomena, should lie hid so long; tho' perhaps some semblances of it may be found among the antients. 'Tis surprizing too, to consider its simplicity and fertility; especially in conjunction with projectile motion. But there must be a divine mind and

Here pow'rs and laws are fit and woven so,
As are unreach'd, undreamt of quite, below.

Alas! alas! you'll ne'er survey

All the contriv'd phenomena,

Nor the survey'd resolve, till you

Shall take, like me, an unembodied view!

power to combine these two together, and conserve them in their combination. But yet these two will not suffice for the production of this world. By none of the known laws of motion, was the number, magnitudes, and distances of the fix'd stars determin'd; or the figures, number, densities, mutual gravitations, situation, and order of the planets adjusted.

* Though our moderns have made eminent advancements in philosophy, yet it may justly be supposed, they are far from perfection. More mysteries in nature, may, in time, be discovered, which then will be more properly call'd *phenomena*. And when those phenomena are observ'd, they will want their solutions. And those solutions may never be had while the world stands. Dr. Cheyne says, it's plain, the moon was design'd to disturb the motions of the earth, for purposes we may, or may never come to discover. *Princ. ch. 3. §. 32.* Mr. Boyle says, he knows not but future discoveries, by improved telescopes, and other philosophical instruments, may oblige us to make changes in the grand system of the universe itself; and in that which we consider as the most important of the mundane bodies to us, the terraqueous globe. *Cosm. susp. p. 9.* Indeed, that little tract shows the want of much discovery in and about this globe.

And Mr. Keil, speaking of the immense subtlety of the particles of light, intimates, that we shall not comprehend it till we come to heaven, (if we may be so highly favour'd, as ever to come there. O that honest curiosity may instigate philosophers to study and take the appointed way thither! It's pity, their superior light should prove their aggravated condemnation!) *Quarum subtilitatem animus humanus nunquam force nisi post adeptam in easis perfectionem, aperquerit. lect. 5.* No wonder then, if heavenly mysteries are not thoroughly understood, till the inquisitive mind gets thither. He that now brings life and immortality to light by his gospel, must bring philosophy to light also by the rays of the superior world. It's meet, such a prospect as this should be afforded, that such excellent light (in which the great creator may be so much seen) should not be lost.

O that I might rich truths and knowledge lend,
 As once *Ficinus* to his studious friend,
 Here's prospect well worth while, worth pains to die,
 And quit the lov'd, the dim researches of mortalitie.

XIII.

Mortalitie ! methinks, the name
 's a kind of passion still creates, blind
 Whilst sensibly it intimates
 The raeful ills and world from whence I came,
 Thei raptu'd with this num'rous dance,
 With globes and balls methodically whirl'd,
 A secret instinct makes me love to glance
 Tow'rs my endear'd, forsaken world.

The story of *Ficinus*, a Florentine philosopher, appearing after his death, to his friend *Michael Mercatus*, to confirm the truth of what they had formerly discours'd concerning the immortality of the soul (and saying, *Michael, vera, vera, sunt illa!*) is related (among others) by Dr. *H. More*, in his *Immort. of the Soul*, b. 2. ch. 16.

The stage of my life's scenes, and my abode !

Wast there, that I a thinking essence grew !

— of These vital clay, and vital ether drew ! —

Was that the world we did so late admire, —

That did our senses charm,

Our fond affections warm,

And set the silly microcosm all on fire !

Was that our source of joy ! and cou'd we there

Build tow'ring hopes, as castles in the air !

Cou'd yon black patches seem the Sov'reign good,

For which proud mortals spill whole streams of blood !

Bless me ! how could we idolize its ear !

Its pompous gauds, and fooleries adore !

How cou'd we for its drois ev'n stoop to kiss

Th' insulting dev'l ! how cou'd we (fools) for this

Barter our deathless selves, our innocence and bliss !

Ah ! fall'n confounded *Globe* thou ! where

The centre's sin, and curse the atmosphere !

Almighty love's old monument ! that hath

Hardly

Hardly escap'd the dint of flaming wrath!

Once splendid par'dise ! once belov'd abode

Of happy angels, and their happy God !

Now ruins of majestic pow'r, that may

Just tell their author and his name betray !

His name in ruin'd fabrics stands compleat ;

Demolish'd temples speak the founder great.

Now no more lustre lives, or rich attire,

Than must, e'er long, pass thro' transforming fire.

¹ See how the weary, trav'ling axes groan

Beneath the pon'drous curse, that's o'er 'em thrown !

Our crimes don't only our own selves confound,

But pain and press the poor creation round.

² Hence rise *errata*, hence disorder sits

To proye a scandal to unthinking wits.

Hell's

¹ The apostle seems to intimate, that the creation groans to be deliver'd from its present bondage and burden ; as if it were pain'd with that vanity and corruption, to which, not willingly, (not of its own nature or original constitution) it is now subjected *Rom. 8. 20, 22.*

² 'Tis impossible, I suppose, now to know all the deviations of the course of nature from the original institution, in the six days of creation. Our naturalists are usually so employ'd in considering the beauty, order, and commodi-

ousness

Hell's suburbs! where impurities in grain,

And loud impieties triumphant reign!

Where

business of the system (and 'tis indeed noble work) that they seem to overlook the incommodeities thereof. It must be own'd, that our globe, as it looks like, so really it is, the ~~ruins~~ of a destroy'd fabric. And yet, as Mr. Derham well answers to the objection of its irregularity, *Physico-Theol.* p. 47.) it is well enough for a sinful world; especially, where tranquillity is so much abused. And it may be added, its well enough for a tem, in which our stay must be so short. But various anomalies are, by greatest philosophers, observed therein; especially, since the mutual gravitation of the heavenly bodies has been evinced. The motion of the earth is said to be disturb'd by the moon; and the moon to have its anomalies. The planets may disturb one another, and the comets them. It is known who would have it, that a comet drowned the world, and another may burn it. Mr. Boyle observes, that those that are thought the grand rules whereby things corporeal are transacted, and which suppose the constancy of the present fabric of the world, are not so uniformly comply'd with, as we are wont to presume. *Cosmic. susp.* p. 19. Mr. Whiston supposes, that the diurnal rotation of the earth might commence at the fall of man. *The satellites of the several planets* (says Dr. Cheyne, *Princip. ch. 3. § 16.*) *suffer many and various disturbances, in their motions, from the sun.* As also the primary planets suffer from the forces of the sun and the secondary planets.

And certainly, 'tis but rational to suppose, the course of the natural world is in some measure alter'd from its primitive state, when the moral world is so depraved and degenerate. Penalty and penal inflictions are now to be ingrafted into the laws, or into the customs of nature (as Mr. Boyle distinguishes.) And 1. It is meet, that those heavens, that declare the glory of God, should, among other portions of his glory, declare his righteousness, and his displeasure with the sin of the world. 2. Primitive curse is still to be executed. 3. Nations and public societies have their national, public sins, which sometimes call for public judgments. Some islands are said to be much more afflicted with storms and hurricanes, since they were inhabited, than they were before. To be sure, there is more provocation to heaven now, than there was before. 4. Amidst the irregularities and enormities of the mundane system, the regularity, order, and commodiousness that shines there, is rendered more illustrious. The preservation and continuance of the whole is the more remarkable. There is one, that presides over the *boisterousness* of matter (as Mr. Boyle calls it) and says to the anomalies and disorders there, *so far shall ye go and no further*. Or else all things might soon be hurl'd into confusion. Though, from these castigatory phenomena, some impious minds, its probable, take occasion to ascribe the whole frame to mechanism or chance. But 5. If this afflictive, penal world has such hold of mens hearts, what would it have if it were all serene and paradisiacal? We have need to be courag'd from hence to a bet-

Where lofty lusts claim scepters for their own,

And scarlet villanies ascend the throne !

Den of enrag'd unrighteous, and their tools !

Cage of conceited and distracted fools !

Where hell's proud prince with pleasure walks each day,

Large empire boasts, and arbitrary sway !

Where headstrong griefs intruding joys controul,

Pierce the soft heart, and wound th' imprison'd soul !

Where pleasures poyson, and torment the mind,

Arm'd with restless stings they leave behind !

Where bright and social virtues soon are found

Choak'd by the baleful mists that there abound !

Where friendship, the dear antidote of strife,

The sweet beguiler of the ills of life,

Friendship, by name, is courted and caress'd,

ter. And the great God may well be supposed to reserve rest to himself, while he indulges other gifts to man, as he is introduced saying, in the divine Herbert,

Then let him keep the rest,

But keep them with repining restlessness,

Let him be rich and weary, that at least,

If goodness lead him not, yet weariness

May toss him to my breast.

But banish'd far from each pretending breast,
 In her due room a nest of vermin lies,
 And selfish, sordid furies tyrannize !

Where conjugal accord, the first and best
 Of friendships entertain'd by human breast,
 The sacred tie, wise heav'n did first ordain
 The help, and (next itself) the heav'n of man,
 Is soon immitter'd with severe allays,
 Transform'd to bane, and canker of his days !

Where vices and confusions native grow ;
 Religion's foreign, and is treated so ;
 No sooner condescends th' ethereal dame
 To visit some dark town with vital flame,
 But straitway all around contrive
 To hoot the heav'nly guest, and drive
 Her home unto the land, from whence she came.
 The pious few, us'd, as unworthy they
 The world, that's so unworthy of their stay ;
 Heav'n's candidates go cloath'd with foul disguise,

And

And heav'n's reports are jeer'd for senseless lies!

Tremendous myst'ries are (so hell prevails !)

Lampoon'd for jargon, and splenetic tales!

Heav'n's heralds, sent to heal and bless the mind,

To summon man from darkness, and from toys,

To starry crowns, and to seraphic joys,

Are treated as the refuse of mankind !

Where, the great son of the eternal God,

Who swayes the world with unresisted nod,

To whose bright sceptre hearts and heads must suit,

Or else be broke and trampled under foot,

While, in our form, salvation he achieves,

Was basely slain, and hang'd with impious thieves !

(Well might the sun, ashame'd, put out his light,

Nor dare to see so terrible a sight !)

From heav'n he came to purchase and espouse,

To light dark souls unto his father's house ;

Lo the returns ! lo there the grateful fruit !

His love and laws lie trampled under foot !

Th' eternal sp'rit of peace, and peaceful might,
 That kindly comes, in crowned Shiloh's right,
 Comes to convey the blessings he designs,
 To treat and strive with alienated minds,
 Is daily griev'd, and spitefully traduc'd ;
 His love and works affronted and abus'd !
 Ah ! how the stubborn miscreants combine
 To baffle boundless grace, and blood divine !

XIV.

Is that the world, we could so ill forgo ?
 The element of death, enormity, and wo !
 Bless me ! what hellish spell controls
 The native pow'rs of heav'n-born souls ?
 What fatal potion charms them to forget
 Their make, their maker, and their maker's seat ?

¹ Alluding to that of Virgil,

~~Lethæ ad fluminis undam,~~
 Securos latices, & longa oblivia potant.

A curse on all our wit and sense of late,
 Which knows and seeks no better world than that !
 Could we, for that, yon glorious joys refuse ?
 That, for our home, and final portion chuse ?
 Bless me ! what hellish shades poor mortals blind !
 What carnous steams infatuate the mind !
 The gracious God (whom grace to give doth move ;
 Then like himself will give, and like his love)
 Would be ashamed (mean as we are, and low)
 Had he no better world and portion to bestow !
 Ah me ! how much more pure and fine,
 How much more noble and divine,
 Is one poor naked soul, than all the world
 The bulky mass of that capacious ball !
 Sweet vision ! (sweet amidst these scenes of wo !)
 Thus clearly, thus compendiously to show
 The several ranks of souls that ply below ;
 What igneous seeds, involv'd in fibrous earth,
 Give the vast, vegetable kingdom, birth ;

How they distinguish food for vital use,
 Breathe, and drive round the circulating juice;
 How they digest, perspire, and drink, and are,
 By seasonable drinking, fresh and fair;
 Breed seminal virtues, and from teeming root
 Shed infant-blossoms, and prolific fruit.
 What more exalted spirits inform and sway
 The capillary limbs of least automata;
 Instil discretion there, and quite out-do
 The feats of matter and its motion too.
 What nobler souls the nobler machines wear,
 Masters of sense, and artful instinct there;
 For their life's bus'ness, and intentions, fit,
 Springs of irrational sagacity and wit.
 What virtue kindles their pneumatic fire,
 And whither, at decease, they silently retire.
 Grand sov'reignty ! that thus was pleas'd to state
 Their ends, and toils, and undeserved fate !
 Too good, too guiltless, to be treated thus,

To be entrall'd, and sacrific'd for us !
 What brighter forms in human fabric reign,
 Ennoble and impeach degenerate man ;
 Outfly weak sense, on metaphysic wings,
 Yet ty'd to muscles, and mechanic strings ;
 Destin'd to light, and incorporeal gust,
 Wedded to clay, and prostitute to lust ;
 Remote from matter, and exempt from death,
 Immediate progeny of almighty breath !
 In close ascents the rising orders grow,
 Holding communion still with those below ;
 From smallest microscopic species there,
 Of nature's armies the most distant rear,
 Up to the frontier squadrons of the skies,
 Does gradual kindred and connexion rise.

² It may well be question'd, whether the microscopical inquirers have yet discover'd the minutest *animalcula*, that are extant. Mr. Hooke (in his *Micrographia*, observ. 55. p. 213.) says, *the least reptile that he has yet met with, is a mite; one of which may be about the hundredth part of an inch in thickness.* But Mr. Leewenhoek will tell us of *animalcula*, a thousand millions of which, will amount to the hundredth part of an inch; and consequently, to the bulk of one of those mites. And he seems to intimate, that there are two sizes less than they. *Ep. of 12 of Nov. 1680.* And *Relig. Philos.* p. 452.

Thus

Thus wisdom, through whole nature's orb, is seen,

³ Leaving no wide, uncomely chasm between.

Tis

Such notion, I suppose, the divine *Herbert* intended in that somewhat obscure verse of his, in his *Providence*;

*Thy creatures leap not, but express a feast,
Where all the guests sit close, and nothing wants,
Frogs, marry fish and flesh; bats, bird and beast;
Sponges, non-sense and sense; mines, th' earth and plants.*

Thy creatures leap not; they rise not one above another, in their several species, or specifical natures, *per saltum*. There is no great *hiatus* or gap between them. Possibly, this may be a reason of the multitude of species in the world. There is to be but a small distance in the rise of one species above another. So divine wisdom is the more illustrated.

But express a feast; resemble a social session at a festal table.

Where all the guests sit close; it may be by arms or legs join'd together.

And nothing wants. There is no vacancy between them; nothing is wanted, nothing wants; no provision wants its guest; no guest wants its place and provision. Earth and water cloath vegetables; and animals (living and dead) have their guests and devourers.

Frogs marry fish and flesh. The frog is an amphibious animal, and unites the terrestrial and aquatic kinds together.

Bats, bird and beast. It is question'd, whether the leathern bat (as it's call'd) is to be number'd to the birds or the beasts. Not to birds, it has no feathers. Not to beasts, it has wings and flies in the air. It is a *medium* (a *medium participationis*; as the logicians say) between both. It is the *copula*, that links both kinds together.

Sponges, non-sense and sense. The sponge has been reckon'd a sensible plant. See *Grew's museum* Soc. reg. p. 252. Mr. *Hook* (in his *Micrographia, observat.* 22.) says, *It is commonly reckon'd among the zoophytes, or plant-animals; and the texture of it, which the microscope discovers, seems to confirm it. For it is of a form, whereof (says he) I never observed any other vegetable. And indeed, it seems impossible (which is a hard word) that any should be of it. For it consists of an infinite number of small short fibres, or nervous parts, much of the same bigness, curiously jointed or contex'd together, in the form of a net.* And he cites *Beilonius* reporting (from *Aristotle*) *sensumq; aliquem habere, vel eo argumento credantur quod diff. illime abstrahantur, nisi clanculum agatur; atq; ad evulsoris accessum, ita contrahantur, ut eas avellere difficile sit; quod idem etiam faciunt, quod est status tempestatisque urgent.* He seems to think (with *Aristotle*) that it was the habitation of some animal; and that the nature of it, well inquired into, would give light to the vessels of animal substances. It may be propos'd to inquiry, whether it may not be, not merely the habitation, but a sort of vital habitation,

'Tis sin, alas! has all the mischief done,
 Broke the creation's harmony, and thrown,
 Beneath the basest brutes, our princely race,
 Down to deep hell, and to fall'n angels place !
 How could I weep (had I my eyes agen)
 The desp'rate case, degraded souls are in !

habitation, having a vegetative connection with an animal; as the shell-house has with the snail. Thence it may derive a sort of sensibility, or a contractive and dilative power. But a medium, it is supposed to be, between insensible and sensible things.

Mines, th' earth and plants. Minerals have their veins and growth; and so are a medium betwixt common earth and organized vegetables. All which is well represented in Dr. Dillingham's version,

Non faciunt saltum, quæ, tu bone, cunq; creæsti,
 Quin epulum referunt, ubi ab hospite, proximus hospes,
 Accubat, inq; vicem tangunt, seseq; prehendunt;
 Carnea sic, rane amphibie, piscesq; maritant,
 Quadrupedem ac volucrem, quibus est a vespere nomen,
 Spongia, quod sentit, sensuq; carentia jungit,
 Tellurem ac plantas facient ramosa metalla.

To which may be added,

Angelicam, brutamq; hominis natura maritat.

And possibly, next to man, there may be vehiculated spirits, of very different orders; some of whom might be those, that are fallen from their primitive station. Then there may be pure spiritual beings, of diverse orders and functions. Over all whom there presides (*θεῖον*) the blessed mediator, who comprises corporeal, created-incorporeal, and divine nature, within the verge of his own unparalleled person, the great reconciler and harmonizer of heaven and earth.

XV.

Is that the world, so courted, and so sought!

For which, the unseen worlds have always fought!

The province, where great God creates anew,

And does a reconciling work pursue,

Yea, rather than his kind designs be spoil'd,

Stoops to beseech us to be reconcil'd!

O how should we admire, and how applaud

The condescensions of th' endearing God!

What is't, at last, the reconciler gains,

But worthless wights, and charge to all his pains!

Yet num'rous pow'rs, by envious passion sent,

Resolve the reconcilement to prevent.

Bless me! my guide, what wounding sight is here!

See, how the spacious regions of the air

Strong'd, with thick shoals of diff'rent sp'rits, appear!

Sec

See now the severall ranks that fell
 From innocence and joys unspeakable !
 Look ! some of coarse alloy, ignoble birth,
 Delight in dens and caverns of the earth ;
 Others, on other purposes intent,
 The atmosphere's incircling climes frequent ;
 The chief, in high, ethereal regions dwell,
 And there in darkness chain'd, possess their hell.
 There sits their prince, there views his legions round,
 There flow their flames, and there their horrors sound.
 There's grand cabal ; and there the counsels grow,
 Which faithful envoys execute below.
 What rage and fear deforms their hideous face !
 A furious, trembling, proud, tormented race !

¹ The foremention'd *Agricola*, whom Mr. Boyle calls the *most classic author we have about mines*, and whom Bodinus stiles *non mediocri eruditione vir*, was a German physician (one, not of the most credulous sect) who has wrote a tract *De spiritibus subterraneis*; concerning some intelligent spirits, that inhabit (or frequent) mines, and subterraneous places; one of whom (as he relates) did, in the shape of a horse, by killing of a dozen men, in a rich silver-mine (call'd *corona rosea*) at *Anneberga*, cause the work to cease.

² *Inquiries into the state of the angelical worlds. Query 29.*

Able to tear the rocks, and rend the skies,
 But dread the poor believer's breath and voice !
 The air they seize, as subject to their throne ;
 The globe they claim, as province of their own ;
 Here forts are plac'd, and plots are manag'd still,
 The winds and clouds are taught to serve their will ;
 Malignant all ! and studious, (as they can)
 To avenge their ruin upon envy'd man !
 Blest pow'r that does their flaming force restrain,
 Saps their intrigues, and galls them with a chain !
 Poor mortals ! drown'd in lethargy and vice !
 Bewitch'd with wit, with foolery, and noise !
 To whom this view is all romantic theam,
 Bring nobly born, to laugh, and drink and dream !
 Blind to the world of un-incarnate hosts !
 The spoils, the foot-balls of contending ghosts !
 Dream on, mad world, thy frantick dreams attend !
 Time flies apace to its appointed end !
 Great Michael now prepares to take

His fatal trump to sound,
 Almighty trump! that soon will make
 Earth's rooms, and heav'n's high roof, to shake;
 Death's adamantine courts to quake;
 The quick and dead to wake;
 Will call past time (unheard-of riddle) back,
 And (since thy age shall such at least be found)
 Will in a moment raise six thousand years from under ground.

The patient judge just ready is to rise

From off his throne, and to repair
 To his tribunal in the air,
 To hold thy universal, thy severe assize!
 Venture, still venture his revengeful ire,
 The raging billows of surrounding fire!

See then, what pow'r thy proud presumption hath
 To save thee from the injur'd saviour's wrath!--
 Oh me! how roaring fiends, loos'd from their cell,
 Run gath'ring, round the globe, supplies for hell!

* 2 *Theff.* 1. 8. line 6 of the (most likely original) text is not in the
 1667 edition. The line is: "L 2 See,

See, how they scatter darkness, and distrust,
 Sow up and down their tares,
 Like fire-balls hurl strong scandals, baits, and snares,
 With pregnant seeds of each enraged lust !

Look, how yon dev'l does, 'midst gull'd crouds, record
 Dark oracles, and craves to be ador'd !

Look, with what zeal, that busy one creates
 Capricious feuds, and jealousies in states !

How archly that does grim complexion paint
 With holy varnish, and bely the faint !

How th' other, near a murder'd carcass hid,
 Walks ghastly, and bemoans th' untimely dead ! ---

That elf's nocturnal walk doth treasure show,
 Old avarice had bury'd long ago.

Ah now, each unbeliev'd, mysterious rite
 Of stalking *spectrums* is expos'd to light.

Of what loose mass they form their pliant dress,

* This is one of the strange phænomena, belonging to *spectrums*, or apparitions, that they (or the spirits within them) can so easily alter and modify that system of matter, they have assumed; proposed by way of query to *Des Cartes*

How change their mien, and visage, as they please ;

What errands call them to appear below ;

What ghostly laws are giv'n them, when they go ;

How they, untouched by lying shapes, impose ;

Dance in their chains, and revel in their woes ;

How they are struck, and strike our organs there,

Throw off their garb, and sink to night and air. ----

O dreadful ! see, how fiery demons fly,

Thick o'er our heads, along th' affrighted sky,

IVX

Cartes by Dr. H. More thus, *Quomodo sagarum spiritus, quos vocant, familiares, materiam tam apte sibi adaptant, atq; constringunt?* And for the truth of this he alledges their own spontaneous confessions to himself ; *Hoc autem fieri non solum vetula, sed juvenes sag, nulla vi coacta, sponte mibi fasse sunt non paucæ.* Ep. 2. ad Ren. Cartes. These confessions will be stiffly denied by those that are resolv'd to believe no reports of that nature. And yet they will take it ill, that all their own senses should be discredited. It may be ask'd, how came so many to agree in the same confessions ? So many of different ages of the world, of both sexes, of different ages of life, different occupations, interests, capacities, and countries ? So many in *Great Britain, Sweden, Germany, Switzerland, France, New-England, and other climates ?* What confession was made to *Bodinus*, may be seen in the preface to his book *de Demonomania*. But *loose majs* I may well speak of in allusion to a story, that a gentleman's servant in *Staffordshire* was wont to relate (who had no reason or interest to devise it) *viz.* that he and a fellow-servant were obliged to attend their master (they were all well and awake enough) in observing a disturbed room ; that in the night, according to expectation, the spectrum came ; and what he observed was, that while the spectrum stood before them and the lights, it look'd like an opaque solid body ; but when it pass'd between them and the light, the light was seen through it. Though whether they always appear with such bodies, may well be questioned.

Dragging

Dragging pale ghosts, all howling from afar,

Rent at the views of the decisive war!

What plots are there, among th' accursed elves,

To involve us in like horrors with themselves!

Strange! they're so fond t' enhance their flaming doom,

And heap up wrath against the day to come!

Impossible, for mortals to secure,

Or to repel the force, or fly the fatal clure!

XVI.

But see, how heav'n's bright posts skip to and fro!

Some sacred gifts convey,

Some brandish'd swords display,

And pour deep vials out, full charg'd with wo!

O me! how tamely some walk up and down,

Attending exiles, forc'd to lands unknown!

Look, some to prison haste, resolv'd to be

With fellow-servants there, or bound or free!

Others,

Others, with wondrous, diligent survey,
 Guard little ones, in cradles and at play ;
 Charg'd still to watch their growing years,
 Discuss their dangers, and their fears,
 Till by adult offences, griev'd away !
 Strange ! yonder's one, midst threatening waves and air,
 A vessel guides, oblig'd by potent pray'r !
 Some, with concern, at sacred temples wait,
 (The porch of heav'n is beauteous Sion's gate)
 With more concern, than ransom'd flocks, that there,
 In fair, pretending companies, appear ;
 Wait, as if they with utmost pleasure came,
 To hear the sounds of the Redeemer's name ,
 Pleas'd to behold (without our glimmering glass)
 The executions of eternal grace ;
 Admiring skill divine, and pros'prous aid,
 (In rearing an) immortal church display'd ;
 Expecting there, and overjoy'd to see

New partners join'd to their societie !

Thus

Thus does our peace their pure affections move,

Blest copies of eternal light and love !

O, with what speed and joy, yon seraphs come,
Conducting their respective charges home ! ---

Strange, that those cherubs thus frequent our sphere,
With demons fight and interfere !

So freely leave their shining post,

And visit each terrestrial coast,

(* Still watch, and act, and travel so,

For mortal things so far below !

XXV
In smoaky, stormy regions dwell,

And with their heaven mingle hell !

But they such office must afford,

(sing) Provok'd by their incarnate Lord ;

They can't more stoop, more servient be,

Nor taste hell's vapours, more than he !

They can't in honour (well approv'd)

Refuse to love, whom he has lov'd ;

(* They are suppos'd to be call'd Watchers, Dan. 4. 13. 17.

Wherever

Wherever he has work to do,
 Ambitious to fulfill
 The dictates of his will,
 They count their heav'n is there, and gladly go.

XVII.

Bless'd God! could that poor globe exalted be,
 To ring o'er heav'n, thus rais'd in thy decree!
 Preferr'd to all the num'rous globes, that lie
 Within thy hand, beneath thine eye!
 Has that dark spot, through ages past, engross'd
 Divine compassion, care, and thought!
 Both fairly conquer'd and dear bought!
 The world immensely blest, by being lost!
 What royal grace pursues our guilty soil!
 With hell's proud prince, divides the captive spoil!
 Worthy in endless odes to sound
 Delights o'er all transgression to abound!

Exalts a chosen, pard'ned part as high,

As others low in deep destruction lye !

Thus must the globe resign its prim'tive right,

Be drain'd of all its natives quite,

Dismiss to rooms of hell, or realms of light.

No wonder sacred oracles declare,

It must fly hence and quit its ancient sphere;

Be thrown aside, as foul'd with sin's disgrace,

Or else refin'd for a more righteous race. ----

Bless me ! would heav'n's high heir, th' eternal son,

Ransom his rebels ! purchase the undone !

Would he put on their flesh, and sojourn there !

Tread cursed soil, and breath polluted air !

Would he there die, and, in the choice of times,

Be sacrific'd for our transcendent crimes ?

There wash black souls with sacred blood o's own,

And lead an earthly spouse to's Father and his throne ! ---

¹ *Revel. 20. 11.* Whence, says Mr. *Whiston*, at the final judgment and consummation of all things, the earth will desert its present seat and station in the world, and be no longer found among the planetary *chorus*. *Theory, p. 200. 100.*

Bless me ! must yonder grov'ling pigmy-wights
 Surmount the lords of these superiour lights !
 Must they the court, and presence-chamber fill,
 With stately'st courtiers vie, in lustre and in skill ! ---
 Sing, angels, sing ! and let new harps be strung,
 To echo consort to a new-made song !
 Sing you, that see bright love's mysterious face ;
 Love ! that involv'd them in designs of grace !
 That see the grace, that all their guilt out-reach'd ;
 That see the hell, from whence they're fav'd and fetch'd !
 (Say'd, while, alas ! your doleful brethren are
 Plung'd in vindictive flames and in despair !)
 That see *His* grandeur, whose rich blood was spilt
 To wash their souls, and blot their crimson guilt !
 That see the pow'r that will their lives retrieve !
 That see the glories, they can scarce believe !
 That see (withal) their vile, ungrateful mind !
 That feel the joys for which they are design'd !
 That from the throne, drink beams and pleasures new !

That know what 'tis to join and equal you !

You that see this, these themes that must employ

The countless ages of eternity,

Who at these views are ravish'd with delight,

Whose singing pow'r's are equal to your sight,

O sing for them ! (if you have songs to spare,

Songs, that undue for your own glories are !)

Ye *cherubs*, first the rapt'rous song begin,

And load the burden of your song

With *hallelujahs* loud and long !

Then *seraphs*, in your time and place fall in ;

Fall in, and catch the rising sound

At its remote rebound ;

Warble, protract, and be

The *chorus* in th' applauding company !

And mount the music high'r, and then

² Ye tall *arch-angels*, seal the song with your *Amen* !

² Revel. 7. 12. To the doxology of the redeemed company, the angels add their acclamation, *Amen*.

Thus live and sing! and as you sing, fall down,

Paying all homage to th' eternal crown !

Sing and adore! and by the songs you raise

Atone for their unpardonable want of praise.

l diu zonseitzen daten do aenleide oft

The following table gives the results of a series of experiments on the effect of carbon dioxide on the respiration of the rat.

XVIII.

longer up to 1900 mm (which is the case).

Farewell, old world! impertinents, adieu!

'Tis time, high time, to take my leave of you!

(Ah grand, importunate impertinence,

That fill'd our heads, and harrass'd ev'ry sense,

And banish'd most momentous thought from thence!)

Time, to surmount what festers or cajoles

Th' imprudent powers of incarnate souls!

Time to retire, that I no more may fear

A wound, or from the ills, or pleasures there !

Farewell, old friends, and foes! old snares, farewell!

And all the busy agents there for hell !

How long, alas! have I endanger'd been

Amid&

Amidst the rocks of devils, and waves of sin !
 You ! How long detain'd, and tortur'd there,
 Upon the shelves of grief, regret, and fear ?
 How hard it was for flesh and blood to quit
 The charms of mirth, and gayeties of wit !
 To conquer sensual scenes, that rise,
 And wound the heart, and twitch the eyes !
 To scorn the scoffs, so plentifully hurl'd
 At care, and conscience, in a bant'ring world !
 Bleis me ! how oft intic'd to abdicate
 The hopes and fears of this suryiving state !
 How oft inclin'd to trample and disdain
 Devotion, and her melancholly train !
 Ready almost, to call the virtuous, fools,
 That laid embargo's upon free-born souls ;
 Foolish and fond ; enough, not to descry
 The bravest peace, and noblest liberty !
 Almost dispos'd, this pitcous self to drown,
 And run the giddy way that takes the town !

Ready, in spight of heav'n, and all its care,
To plunge into enjoyments, and despair! ---
O, why prevented? why redeem'd from thrall
Of such black thoughts, by which such myriads fall?
Why not resign'd to self, and all the foul,
The fierce desires, for which yon spirits howl?
O blest silk-twist, let down from heav'n above,
That catch'd the fickle heart, and link'd it into love!
Blest hand, that did the fey'rish humours heal,
And gave the sickly mind a happy crisis still!
What pleasure 'tis, to be thus unconfin'd,
And leave so dangerous a world behind!
Awake, awake, ye righteous few!
Scarcely, ah! scarcely say'd are you!
Wake, friends, and watch! time swift and silent flies,

• Alluding to that of Mr. Herbert,

Yet through the labyrinths, not my groveling wit,
But thy silk-swift let down from heav'n to me,
Did both conduct, and teach me, how by it

³ *Invigilate viri, tacito nam tempora gressu
Diffugiant, &c.*

The winged year wheels round without a noise.

Put on fresh strength! of *Philistines* beware!

And fight like *Sampson* in his longest hair!

The work of life, the walk by faith, attend!

Secure but perseverance to the end;

(The end, alas! advances high,

Death will wait on you by and by,

Then endless life, eternal truth secures,

And crowns and palms will be for ever yours!

Eternity wings onward, and will glarc

Upon your inward, op'ned eyes,

I fear, before you are aware.

Prevent the dread surprize!

Soon will you see that phantom-world withdrawn,

And all its *Stygian* steams,

And wild, phanatic dreams,

Will soon be over and for ever gone!

Soon will this view an awful temper gain,

And quench the lawless heats of blood and brain;

Soon

Soon will you curse the world's lethargic ease,
And bless the hand, that signs your safe and sweet release.

XIX.

But while I wistfully survey

The little globe, where I my being gain'd,

Methinks, I'm seiz'd upon the way,

And forcibly detain'd

By yonder grave procession that's begun !

Look there ! with what solemnity,

And mournful decency,

That funeral pomp advances slowly on !

Alas ! alas I see,

By something of the companie,

But more by sympathetic qualm I find,

There go the reliques, that I left behind !

There they are marching to the silent room,

That truly long ago

N

Was

Was due to them, and destin'd so
 By guilty nature, and inexorable doom.
 Thanks, pious friends, so loving, and so good,
 Who this last office pay,
 Who thus respectfully convey
 The useles cargo to an undisturb'd abode!
 Kind ministers of law severe and just,
 That thus demands our dust to dust!
 May you long live, and supersede
 Such fatal services, nor need
 Such gloomy tenebry, but when ye do,
 May the same favour, friends, be paid to you!
 Alas! what diff'rence now appears to be
 Betwixt immortal me,

It may not seem incongruous to give thanks for a funeral, if we consider the surviving affection the departed spirit is generally supposed to bear to the forsaken body; and if we remember how earnestly *Palinurus* is represented by the poet, begging an interment of *Aeneas*,

Quod te per cali jucundum homens & auras, &c. &c.
Per genitorem oro, per spem surgentis Iuli
Eripe me his, invicte, malis, aut tu quoq; terram
Injice.

And Dr. More tells a story of a grateful ghost, who, in requital to *Simonides*, for burying his body, war'd him of the danger of his intended voyage, and thereby sav'd his Life. *Immort.* I. 2. ch. 16.

And

And poor, bereaved carcass, thee!

How vital, sprightly, and perceptive I!

Offspring of heav'n, and rival of the sky!

Fill'd with amazement, and delight anew,

On this surprizing, intellectual view!

Awak'd to act, and see, and feel much more

Than all th' imprison'd powers could before!

Fled from the crannies of embarrass'd sense,

I'm grown all eye, and ear, and all intelligence.

Mean while, how squalid, and how dismal thou,

Abandon'd, and defenceless now!

Dismal, as is death's melancholy shade!

And squalid as the place where thou art laid!

No dawning sun can cheer thee with his light;

No moon or stars peep in by night.

Late a well-guarded fort wast thou,

Abandon'd, and defenceless now!

² The double guards appointed to oppose

The

² It is not easy to determine which of the parts and vessels of the body, are design'd by some of the names, that are given them in Solomon's pourtrainture

The insults of approaching foes,
 Hayc all their trusts and offices deny'd,
 Fall'n cold and moveless by thy side ;
 Can drive no tim'rous mole or worm from thence,
 To wooden walls oblig'd ev'n for their own defence.

³ The pillars of thy fabric now no more
 Support the weight that once they bore ;
 Down they are fall'n, and sunk beneath the ground,
 With earth, and their own ruins, cover'd round.
 The whole retinue that attended thee,
 Must henceforth pine, and starve, and famish'd be ;
 The mill is done, and service there,

of old age; which, though in themselves, allusive and metaphorical, as the *silver cord*, the *golden bowl*, the *pitcher* and the *cistern*, might be as common and familiar among the Hebrew anatomists, as such names, the *pia*, and the *dura mater*, the *pylorus* and the *porta* are, among ours. But want of books in Hebrew anatomy must make us at a loss for the application of their names, as well as want of books in our anatomy, would leave room enough for them to guess what we should mean by the names now mentioned. Eccles. 12. 3. *When the keepers of the house shall tremble.* The body may well be compar'd to an house, or castle. The *keepers of the house*, the guards that stand sentinel, may well be supposed to be the arms, consisting of shoulders, elbows and hands. These upon death, do not tremble, but fall utterly useless. Solomon mentions the decay; but here the dissolution is described.

³ *The strong men shall bow themselves.* These are supposed to be the strong parts of the Body; the back, the hips, and legs, with their joints and muscles, that uphold the bulk of the body.

4 The grinders can prepare no cheer;

5 The watchmen, for their function seated high,

Ordain'd the ambient region to descry,

Look out no more, nor mind the foc,

6 Nor give their *Items* to the guards below.

7 The doors are barr'd, and silent ev'ry room,

No grateful visitants can go or come.

8 The ministers of harmony

Distun'd and speechless lie!

All stopt the organs! and all broke the keys!

More lifeless than the strings that late did please!

Delights are gone, and tempting objects fled,

4 The grinders shall cease. Supposed to be the teeth. Thereupon the mouth may easily be compared to a mill.

5 Those that look out of the windows be darkned. Whether the globes of the eyes are here intended, as looking out of their sockets; or the animal spirits, as looking out of the eyes; yet the visive organs are here usually understood.

6 The doors shall be shut in the street. Some, by the doors, understand the organs of sense. Others the lips, as being the doors of the mouth. It may be read, the doors in or with the street shall be shut. Possibly, the *prime viae* may be intended; the great passage or road thro' the body; that, and all the avenues thereto shall be stopt. Some avenues have their valves, others, their sphincters; all will be shut.

7 All the daughters of music shall be brought low. The daughters of music may be either the receivers of music, the auditory organs; or the makers of music, the instruments of melody. The latter seem to be intended.

8 And

8 And all thy inclinations too are dead ;
 Little, didst thou consider sure,
 When youth and blood was warm,
 What dire catastrophe thou must endure,
 Unstirr'd by wonted springs, and deaf to ev'ry charm !

9 Alas ! the silver cord, that ty'd
 The jointed beam and rafters close,
 That strength and tone around the walls supply'd,
 Untwisted lies, and all its branches loose !

10 The golden and capacious bowl,
 The house and laboratory of the soul,
 With all its vital furniture's destroy'd.

No forge nor flame remains
 No more it fashions or contains,
 The subtil utensils I manag'd and employ'd.

⁸ Desire shall fail. As all the executors of appetite will fail; so all appetites, natural and contracted, regular or inordinate, will then be extinguish'd.

⁹ Or ever the silver cord be loas'd. The *medulla spinalis*, the white string of vital marrow, that runs down from the brain to the end of the back-bone, and distributes nerves over the ribs, and other parts of the body.

¹⁰ Or the golden bowl be broken. If the vessel here be denominated *golden*, from the colour of its liquor, somewhat may be said for understanding either the urinary bladder, or the gall bladder. But the denomination may import its value or preciousness. And so I take it, as usual, for the *dura mater*, or membrane that involves the brain.

" The fountain, that in 'midst did play,

And thro' each room cut out its lambent way,

Exhausted is of all its store,

And loads the pitcher with its streams no more.

" The wheel is broke, and each nutritious juice,

" *Or the pitcher be broken at the fountain.* I would here suppose, that the fountain is the heart. But that the pitcher should be the great vein that fills the heart (and so the pitcher fill the fountain) seems not natural or proper. I should rather suppose, that the pitcher is the *aorta* (the great artery) which (as Dr. *Keil* reckons) is fill'd every hour with four thousand ounces of blood, pour'd out of the fountain, the heart. *Animal. secret.* p. 47.

" *Or the wheel broken at the cistern.* This seems a difficult passage. That (according to Dr. *Smith*, the great interpreter of this context, who hence concludes, that *Solomon* was acquainted with the circulation of the blood) the fountain and the cistern should be but parts of the same vessel, the one the right, the other, the left ventricle of the heart, seems, to me, not so probable. *Solomon* might as well know the circulation of the blood, if the wheel were supposed to be the lungs. The blood passes from the heart to the lungs, and from thence to the heart back again. And the *arteria venosa*, the pulmonic vein, that brings the blood back to the heart, may be the cistern. Or, somewhat may be said for the *dura mater*'s being the wheel, which (according to Dr. *Bagby's doctrine*) is the *primum mobile* in the human machine; has natural pulsation, upon which depends the pulsation of the heart, and consequently, the whole circulation. Which seems also confirm'd by Dr. *Keil*, when he says, *Therefore the pulse in the arteries of the brain must be very languid or none at all, upon which account the motion of the spirits must cease, and consequently that of the heart.* *Animal secret.* p. 93. And then, if the *dura mater* be the wheel, the brain may be the cistern, as being the great canal of the animal spirits (or nervous fluid) sent from thence into all the body. And now, of late, something may be said for the spleen's being the cistern, from Dr. *Keil*. For after he has ask'd, *How must the velocity of the rest of the blood (to which the intestine motion is always proportional) be abated?* He answers, *Nature has here an extraordinary contrivance. She empties the blood entirely out of the vessels into a large spongy bowel, or rather cistern, provided for that intent and purpose.* Which, with him, is the spleen. How this agrees with the loss of the spleen, which has been taken from some animals, (as from dogs) let the anatomists judge. But, I fear, the most ingenious application of names, that can here be made, will be but ingenious conjecture.

That

That did with life abound,
 And gather'd more by whirling round,
 Now stagnates, and corrupts, for want of ancient use.
 13 The curious net-work, and mechanic lace,
 Dissolves and melts apace ;
 Where's now th' embroid'ry of each sumptuous part?
 Was this the mirror of unbounded art ?
 Strange, that the maker should his work disdain !
 Unravel't all, as if 'twere made in vain !
 As if he, thro' repentance, now destroy'd
 The work, once his delight, and once our pride.
 But see the pow'r of law and wrath divine !
 In darksome graves does heav'n's bright justice shine !
 See, how provoking human race has been !

13 Some vessels, belonging to the body are incredibly fine, and platted together and interwoven in curious works. The glands are found to be a clew or skein of most minute and slender pipes, variously contorted and folded together. The lungs and liver consist of bunches of small bladders, overlaid with blood-vessels, woven into admirable network. *Leenwenboek* takes the brain (which to us seems a mass of thicker jelly) to be a strange complication of most fine vessels, into diverse cells and figures, for divers uses. The coats of vessels are suppos'd to be other vessels curiously wrought together; and those vessels to be made of others, so complicated and twisted; and so on, beyond the reach of human indagation. All which network will soon dissolve and break to pieces. It's wonder, it lasts so long. But great is the preserver of man.

See

See there the wages of hereditary sin !

But strange, that things so distant should combine !

That spirit and clay should in such wedlock join !

Strange, that I should so long, so gladly dwell

With such an uncouth inmate and unsuitable !

Strange, that I should such noisom presence bear,

And doat upon that fordid lumber there !

XX.

But yet I must with due resentment own

What once thou wast, and once hast done ;

My loyal, my coeval bride,

Spous'd at his command, I

Bestow'd by his own hand,

Who the first pair in nuptial union ty'd !

Farewell, farewell, my dear !

The constant partner of my hope and fear !

My bosom-friend, my old relief !

O

Whose

Whose kindness would be sure
 To seek my wounds a cure,
 And by a sigh or tear strive to dissolve my grief!
 Farewell my prison, my disease!
 What pining seasons were
 My treatment, and my fare,
 As long as thou wast made the keeper of my peace!
 Go tempter, go, as thou hast been
 A quick extinguisher of heav'nly fires!
 A source of black enormity and sin!
 Thou cramp of sacred motions and desires!
 How brave and blest am I
 Unfetter'd from thy company,
 Thou en'my of my joys and me!
 But pardon that I thus
 Unconsciously accuse!
 How much more cruel have I been to thee!
 'Twas cruel I, oblig'd thee to obey

The

The wilful dictates of my guilty sway!

'Twas I, made all those ills, and death thy own,

Condemn'd thee to the jail, where thou art thrown,

My crimes debauch'd thy dust, and forfeited

Thy happy restoration from the dead,

But 'tis resolv'd, dear mate, that we

Shan't always thus divorced be;

We'll meet again, long, long to try

What vigour absence adds to joys

Be sure then, grave, thou faithful prove,

The dear *depositum* observe,

Tell ev'ry sinew, bone, and nerve,

They're all recorded in the register above.

As they dissolve, tell ev'ry dust,

For tho' thou call'ſt it thine,

Thou must it all resign,

'Tis but a while committed to thy trust.

When the awak'ning trump shall sound,

Thy vast accounts shall be call'd in,
 Be canvas'd, that it may be seen
 What thy arrears and debts have been
 To th' overseer of all consecrated ground;
 Thy mighty landlord he! who still will have
 The keys of death, and of the grave!
 He'll watch those purchas'd reliques there, which we
 Lay down with grief, and leave with thee.
 Thy captiv'd tenants all are his,
 His prisoners, or his heirs of bliss;
 The one, he will demand to doom,
 And kindly fetch the other home.
 He sees thy constant rage, but meaneth to
 Enhance his honour in thy overthrow.
 He'll burst thy bowels, and by pow'r
 Force thee all that food restore,
 Which thou, e'en cannibal, didst e'er devour.
 Sleep then, dear mate, in peace, in quiet dwell,

Secure from all thy cares,
From me, and foes, and snares,
Sleep on, till I return to call thee from thy cell.



A



A LATIN RHYME,

Describing Eternity ; cited by Mr. Rob^t.
Bolton, in his *Four last Things* ; par-
ticularly in the Discourse of Hell.

EX quo poli sunt perfecti,
Aude numero complecti
Stellas cœli, stillas roris,
Undas aquei fluoris,
Guttas imbris pluvialis,
Floccos velleris nivalis ;
Quot sunt vere novo flores,
Quot odores, quot colores ;
Quot

Quot vimaceos autumnus,
 Poma legit et vertumnus;
 Quot jam grana tulit aetas,
 Frondes hyemis tempestas;
 Totus orbis animantes,
 Aer atomos volantes,
 Pilos ferae, pecus villos,
 Vertex hominum capillos;
 Adde littoris arenas,
 Adde graminis verbenas,
 Tot myriades annorum,
 Quot momenta saeculorum,
 Heus, adhuc eternitatis
 Portus fugit a damnatis!

English'd at the Request of an ingenious Friend:

LET that arithmetician come,
 Can multiply a boundless sum;

In

In figures can produce a draught,
 Beyond his pen, beyond his thought,
 Can join the various numbers made,
 E'er since the poles of heav'n were laid.
 Upon your tables first descry
 The tapers of the galaxy,
 With all the lamps that heav'n adorn,
 And all the pearls of dewy morn;
 Tell all the vital rills that flow
 Through secret veins of earth below,
 With upper streams, whose large command
 Distributes plenty o'er the land;
 Tell all the chrystal tears that rise,
 And fall from weeping nature's eyes,
 And fleecy locks, that ever spread
 Her limbs with winter-coverlid;
 And then into thy numbers bring
 The tender infants of the spring.

Their features and proportions tell,
 And their complexions, and their smell ;
 Then clusters count, which vineyards dress,
 Whose juice intoxicates the press,
 And all the stores the orchard yields,
 When rich *September* crowns the fields ;
 Each single grain of corn run o'er,
 Which plenteous harvest ever bore ;
 Count leaves that fall, when winter's breeze
 Does comb the woods, and poll the trees ;
 And all the lives, that fruitful earth,
 And pregnant seas, did e'er bring forth ;
 Go on and don't one atom spare
 That dances up and down the air,
 Nor finest thread, that ever suits
 The shaggy garments of the brutes ;
 Nor smallest hair that ever spread
 An ornament on human head ;

P

Then

Then add the num'rous sands that be
The chains of the enraged sea,
And all the spires that e'er were seen
To cloath the fields with native green;
Let myriads then of years be run,
As moments past since time begun,
Yet still eternity surmounts,
By endless flight, your vast accounts.
What mind (alas) can bear to state
The durance of the damned's fate!
When they thus long in flames have roll'd,
And all these years in darkness told,
No help (my friend!) no hope remains
To shift their doom, or slip their chains;
Nay if by joining millions more,
You still enhance the nameless score,
When they so many ages shall have seen,
Eternity still lives, and still does but begin.



Mr. Cowley's Epitaph, in *Westminster-Abbey*.

AUREA dum volitant late tua scripta per ortem,
Et fama æternum vivis, divine poeta!
Hic placida jaceas requie; custodiat urnam
Cana fides, vigilentq; perenni lampade musæ!
Sit sacer iste locus! nec quis temerarius ausit
Sacrilega temerare manu venerabile bustum!
Intacti maneant, maneant per saecula dulcis
Couleii cineres, serventq; immobile saxum!

Paraphrased.

WHILST thy rich works spread round th' admiring
 world thy fame,
 Perpetuate thy life, and eternize thy name,

Here honourably rest, blest bard! and now may here
 Thy watchful genius, old *Integrity* appear!
 May his companions too, the heav'nly graces turn
 In hither, and secure thy venerable urn!
 May they in thoughtful silence and devotion wait,
 Respectful mutes, around thy dusky room of state!
 May all the grateful muses here henceforth resort,
 Dispatch their dictates hence, and keep their tuneful court!
 May all their lamps thy *flamme sepulchrales* be,
 Their lamps, that owe their brighter lustre unto thee,
 Their rays of old Pindaric light and libertie! }
 All hallow'd be these bounds! and no bold wretch presume,
 With sacrilegious touch, to vex the peaceful tomb!
 Here may the sweet, the sacred *Cowley's* relicks rest,
 For ever unmolested, and for ever blest!
 Seal'd may this marble lie! and awful watch and ward
 Be night and day maintain'd by all the rev'rend guard!





But this you sinfully offend us
De meoie pastore

A Verse of Mr. Herbert's,

Not that he may not here

Taste of the cheer,

But as birds sip and strait lift up their head,

So must he sip and think

Of better drink,

He may attain to, after he is dead.

Latiniz'd.

NON, quod non liceat mundi tentare sapores,

Aut gustare quidem humanæ bellaria vitæ,

At veluti volucres modicæ libamina limphæ

Restinguendo sitim, viresq; novando, pitissant;

Protenus et grato tollentes lumina vultu,

Respiciunt

Respiciunt vicibus cœlum, agnoscuntq; datorem;
 Sic nobis sanc potandum est, atq; putandum.
 De meliore haustu, de deliciisq; serenis,
 Cœlesti in patria, cœlestem interq; catervam,
 Dulcius ex ipso post funera fonte bibendis.



To the Memory of the divine Mr.
George Herbert, Author of the
Temple.

SERAPHIC Singer ! where's the fire
 That did these lines and lays inspire ?

B'ing dropt from heav'n, it scorn'd to dwell

Long upon earth, and near to hell !

The heart it purg'd, it did consume,

Exhal'd the sacrifice in fume,

And with it mounted, as of old

The angel, in the smoke enroll'd ;

Return'd

Return'd in haste, like thine own * *star*,
 Pleas'd with its prize, to native sphere.
 But blest perfume, that here I find,
 The sacrifice has left behind !
 Strange ! how each fellow-saint's surpris'd
 To see himself anatomiz'd !
 The *Sion's* mourner breathes thy strains,
 Sighs thee, and in thy notes complains ;
 Amaz'd, and yet refresh'd to see
 His wounds, drawn to the life, in thee !
 The warrior, just resolv'd to quit
 The field, and all the toils of it,
 Returns with vigour, will renew
 The fight, with victory in view ;
 He stabb'd his foes, and conquers harms,
 With spear, and nails, and *Herbert's* arms.
 The racer, almost out of breath,
 Marching through shades and vale of death,

* See the ode intitled, *The Star.*

Recruits, when he to thee is come,
 And sighs for heav'n, and sings thy ^a *Home* ;
 The tempted soul, whose thoughts are whirl'd,
 About th' enchantments of the world,
 Can o'er the snares and scandals skip,
 Born up by ^b *Frailty*, and the ^c *Quip* ;
 The victor has reward paid down,
 Has earnest here of life and crown ;
 The conscious priest is well releas'd
 Of pain and fear, in ^d *Aaron* drest ;
 The preaching envoy can proclaim
 His pleasure in his ^e *Master's* name ;
 A name, that like the grace in him,
 Sends life and ease to ev'ry limb ;
 Rich magazine of health ! where's found
 Specific balm for ev'ry wound !
 Hail rev'rend bard ! hail thou, th' elected shrine
 Of the great Sp'rit, and *Shechinah* divine !

^a *Home*. ^b *Frailty*. ^c *The Quip*. ^d *Aaron*. ^e *The Odour*.
 See the odes under these titles in Mr. Herbert's poems.

Who

Who may speak thee! or aim at thy renown;
 In lines less venerable than thy own!
 Silent we must admire! upon no head
 Has, since thy flight, been half thy unction shed.
 What wit and grace thy lyric strains command!
 Hail, great apostle of the muses land!
 Scarce can I pardon the great *Cowley's* claim,
 *He seems t' usurp the glories of thy fame;
 'Tis *Herbert's* chartis must chase (whate'er he boasts)
 The fiends and idols from poetic coasts;
 The *Mistress*, the *Anacreontic* lays,
 More demons will, and more disorders raise,
 Than his fam'd hero's lyre, in modern play,
 Or tun'd by *Cowley's* self, I fear, can lay;
 'Tis *Herbert's* notes must un-inchant the ear,
 Make the deaf adder, and th' old serpent hear.

Cowley, in the beginning of his *Davideis*, says.

*But thou, eternal word, hast sent forth me,
 Th' apostle, to convert those worlds to thee.*

against

Q

Soon

Soon had religion, with a gracious smile,
 Vouchsaf'd to visit this selected isle ;
 The *British* emp'ror first her liv'ry wore,
 And sacred cross with *Roman* eagles bore ;
 The sev'ral states, at last, her empire own,
 And swear allegiance to her rightful throne ;
 Only the muses lands abjure her sway,
 They heathen still, and unconverted lay.
 Loth was the prince of darkness to resign
 Such fertiliz'd dominions, and so fine.
Herbert arose ! and sounds the trumpet there,
 He makes the muses land the seat of war,
 The forts he takes, the squadrons does pursue,
 And with rich spoils erects a *Temple* too ;
 A structure, that shall roofs of gold survive,
 Shall *Solomonic* and *Mosaic* work out-live ;
 Shall stay to see the universal fire,
 And only, with the temple of the world, expire.

Strange, the late bard should his devotion rear
 At * *Synagogue*, when, lo ! the *Temple's* near !
 Such sacrilege it were of old, t' espouse
 The wandring tent, before the wondrous house ;
 The house, in which a southern queen might be
 A sacrifice to art and ecstasie.
 Poor poets thus ingeniously can prove
 Their sacred zeal misguided as their love !

Go forth, saint-bard ! exert thy conqu'ring hand !
 Set up thy *Temple* through the muses land !
 Down with the stage, its wanton scenes cashier,
 And all the demons wont to revel there !
 Great *Pan* must dy, his oracles be dumb,
 Where'er thy temple and its flames shall come ;

* Cowley, taking no notice of Mr. Herbert (an ornament of the British church) writes an elegy for Mr. Crashaw, author of the *Synagogue* (usually bound up with *Herbert's Temple*) ; which Mr. Crashaw (as appears by Cowley's Poem) afterward turn'd papist, was chose canon at *Loresto*, and soon died of a fever.

Convert the *Muses*, teach them how to be
Ambitious of the *Graces* companie ; and i ad agnone
Purge *Helicon*, and make *Parnassus* still *ayogm2* 1A*
To send his vicious streams to *Sion's* hill ! *ayogm2* 1A*
Thence banish all th' unhallow'd, tuneful men, *new soft*
From *Homer*, down to the phantastic *Ben* ! *shoo! soft*
Baptize the future poets, and infuse *ben no or softest A*
A sacred flame in all belov'd by muse ! *am 2209 1001*
Teach them the efforts of great *Shiloh's* love, *2208 1001*
The anthems, and the melodies above !
Tell them what matter, and what theam's in store, *2208*
For sacred past'ral, and divine amour ; *ayogm2* yd: qu 102*
Shiloh himself would condescend so low, *ayogm2* yd: qu 102*
To be a shepherd, and a bridegroom too. *ayogm2* yd: qu 102*
What myst'ries in church militant there be, *ayogm2* 1001*
Teach them to look, and soar, and sing like thee. *ayogm2* 1001*
Here poesy's high birth, and glory shine,
'Tis here, redeem'd to primitive design ; *ayogm2* 1001*
"Tis

*Tis here, that it, like other grace, we see
From glory differs only in degree!

Whilst to thy temple proselytes repair,
And offer, and inflame devotion there.
Whilst, on its pillars deep inscrib'd, thy name
Stands consecrated to immortal fame,
Do thou enjoy the rich resolves of ²*Love*,
The pleasures, the society above!
No more thou'l tune thy lute unto a strain
**That may with thee all day complain*;
No more shall sense of ill, and ³*Griefs of time*
Distune thy viol, and disturb thy rhyme;
No more shall Sion's wrongs and sorrows sharp,
Upon the willows hang thy trembling harp;
The wish'd-for sight, the dear perfection's gain'd,
The ⁴*Longing*, and the ⁵*Search*, have now obtain'd;

¹*Love*. ²*On Eph. 4. 30.* ³*Grief.* ⁴*Longing.* ⁵*The Search.*
See the odes under these titles in Mr. Herbert's poems.

On Sion's mount join thou the blissful throng,
 That here were skill'd in sacred love and song; more
 Consort with *Heman*, *Asaph*, and the rest,
 Akin to thee, in Temple-service blest;
 Who all rejoice thy lov'd access to see,
 And ply their harps, no doubt, to welcome thee;
 Music and Love triumph! and *Herbert's* lyre,
 Serenely sounds amidst th' harmonious quire!
 There still, on *Love* in his own person, gaze,
 Drink in the beams flow from his radiant face,
 Still to thy harp chant forth th' immortal Verse! *
 Does *Love's* exploits in foreign land rehearse,
 Move him to hasten his return below,
 That church, now mil'tant, may triumphant grow,
 And all thy prof'lyte-bards may mount, and see
 The Temple there, and all the scenes of joy, with thee! T

Sen.



Sen. Thyest. *Act. 2. Chor.*

*Rex est qui metuit nihil,
Rex est, quiq; cupid nihil,
Hoc regnum sibi quisq; dat.*

WHAT ails the mortals, that they so
Contend for empire here below!
When he's a prince, and well may vye
With loudest name in monarchy,
Who sways with sweet and soft controul,
The wide dominions of his soul;
Who, with a free, despotic hand,
Has all his passions at command;
Makes appetites and humours wait
At reason's throne, and wisdom's gate;

Who

Who nothing fears, save to molest

The spring of peace within his breast;

Lives unconcern'd at what may be

Lock'd up in dark futurities,

Whose just desires are still confin'd

To noble treasures of the mind,

Nor hunts for wealth, nor covets more

Than frugal state of earthly stores,

Who thus with sails and streamers whirl'd,

Rides master of the lesser world,

Has more of king, and kingly robe,

Than he that governs half the globe.

And now, what's strange, (believe it you,

'Tis not more strange, my friend, than true)

There's none but may (how'er so low)

This kingdom on himself bestow;

A kingdom, that more pleasure sheds,

Than all the pomp of crowned heads.

Then

Then follows,

Stet quicunq; volet potens

Aule culmine lubrico;

Me dulcis saturet quies;

Obscuro positus loco,

Leni perfruar otio;

Nullis nota Quiritibus

Etas per tacitum fluat.

Sic cum transierint mei

Nullo cum strepitu dies,

Plebeius moriar senex;

Illi mors gravis incubat

Qui notus nimis omnibus

Ignotus moritur sibi.

Who will, for me, mount fortune's seat,

Frequent the court, and court the great,

Ambitious on proud heights to stand,

Begirt with vassals, and command;

From pomp and palaces, that have
 But forc'd communion with the grave,
 From city-noise, and airs, and fire,
 May I and my last days retire;
 May I with humble, rural rest,
 And studious ease, at last, be blest;
 Withdrawn to some secluded place,
 Where life improv'd prolongs its race;
 Where neither pride nor envy reigns,
 Nor wild ambition boils the veins;
 Where breasts are calm, and heads are bright,
 Free as the air, serene as light;
 Where early rays around me creep,
 And break the downy chains of sleep,
 Refresh the nerves, and paint the room,
 And shew the heav'n from whence they come;
 Where gardens strive to re-convey
 The life, that towns have stol'n away;
 Where

Where colours, shapes, and odours vy
 In all their charms, for mastery,
 Accost the organs, and demand
 Some tribute for the maker's hand;
 Where verdant fields, and pregnant hills
 Mature the gifts, that heav'n distills;
 Where lively trees spread fruit or shade,
 And warn that we for use were made;
 Where tuneful birds provoke to raise
 An ode to our joint-maker's praise;
 Where nought of noise the place affords
 Save bleating flocks, and lowing herds,
 Or streams that treble out their way,
 Or winds that in bass-consort play;
 And through the clime, 'tis well display'd
 How great a tenant man was made,
 And what a thankful rent he owes
 To him that stock and farm bestows.

Where scatter'd neighbours, kind, and good,
 As at the first earth's natives stood,
 (Before the vice, in cities found,
 Had thus diffus'd itself around)
 Without deceit, without debate,
 Can talk their minds, and truth relate,
 Whom useful life and labour bind,
 To mirth and mutual aids inclin'd ;
 In converse, fair ; and honest prove
 Both in religion, and in love.

Where neither foul nor flatt'ring fame
 Pretends to blaze the silent name,
 Nor to grandees or patrons tells
 The lone recess, where *R*---- dwells ;
 (Who may no patron's name rehearse,
 That will admit an humble verse.)

Here may I live, and learn to die
 To all that fades as fast as I ;

Live here, remote from care and strife,

A student of superior life.

for has show you ed in your own

Some books, the transcripts of the mind,

Which sacred souls have left behind

Which hold the light, and shew the road,

By which they travell'd up to God,

Should entertain the thinking powers,

And well arrest the sliding hours;

And then (if man such bliss may crave,

Or hope for, on this side the grave)

May there be join'd a friend, or two,

To share my joy, and sooth my wo,

To cherish zeal, and fit designs,

And oft compare our notes and minds;

Thus may I future days employ

In sacred solitude and joy;

in A

How

How solid is the joy, that flows
 From studious and devout ~~repose~~ to ~~modest~~ A
 Here may it be my work and rest
 To learn the converse of the blest
 Loosen from clay and upward move,
 A candidate for realms above;
 So when this busy silent age,
 Shall finish its appointed stage,
 Thus fill'd with life, and fir'd with love
 To the transcendent life above
 With dutiful content, may it no ~~so~~ ~~hope~~ for me
 An honest old plebeian die
 Or puritan, (if so you please;) to
 The race lov'd, piety and peace,
 Heavy to him (unhappy he,) I ~~say~~ this
 Will death in its approaches be

And such a dreadful pressure lay'd on his A)
 At his cold heart, as justly may be sett'd out
 (In view of life's protracted crime) in the next
 Press out his soul before the time, so much so it
 Who being introduc'd (alas!) by such or bA
 Among the sons of human race, immixt wth oT
 And fam'd in time, and noisy grown,
 To all in town and country known,
 (That he can dress, or dance, or feed,
 Or run with dogs, or rule the steed).
 Knows not himself, nor ever sees
 What life, and what life's bus'ness is ;
 Knows not the value of the mind,
 That is for future state design'd,
 Nor how to burnish, and refine
 The powers that might richly shine ;
 Knows not what 'tis (poor wretch ! think I,)
 Or to be born, or what to die ;

(A case so desperate, and forlorn,
 That better he had ne're been born!)
 When he that's born, is born to be
 The tenant of eternitie;
 And he that's lodg'd among the dead,
 To an eternal world is fled.

11.7.49

F I N I S.

